BELMONT SPRINGHILL SUITES HOTEL

Initial Study

Prepared for
City of Belmont

August 2015

ESA

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City of Belmont

August 2015

550 Kearny Street
Suite 800
San Francisco, CA 94108
415.896.5900
www.esassoc.com

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SECTION 1
Project Description

1.1 Introduction

Belmont Hotels, LLC (herein referred to as the "project applicant") represents the owner of the property located at the southeast corner of the intersection of Shoreway Road and Cormorant Dive in the City of Belmont, California. The project applicant proposes to construct a hotel on the property.

This document is an Initial Study (IS) that analyzes the potential environmental impacts of the proposed construction and operation on the project site. This IS was prepared in compliance with Public Resources Code Section 21000 et seq., California Environmental Quality Act (CEQA) of 1970 (as amended), and Title 14, Chapter 3 of the California Administrative Code, the state CEQA *Guidelines*. In accordance with CEQA *Guidelines* Section 15063, an IS shall be prepared to determine if the project may have a significant effect on the environment.

In accordance with Section 15063 of the CEQA *Guidelines*, this document is being circulated to local, state and federal agencies and to interested organizations and individuals who may wish to review and comment on the report. Written comments may be forwarded to:

City of Belmont
Carlos de Melo, Community Development Director
One Twin Pines Lane, Suite 110
Belmont, CA 94002
Email: cdemelo@belmont.gov

1.2 Project Summary

The project applicant proposes to construct a 169-room hotel intended to serve the technology corridor of Highway 101 (U.S. 101). The four-story hotel would occupy a 147,668-square-foot (sq. ft.) (approximately 3.39-acre) lot set at the southeast corner of the intersection of Shoreway Road and Cormorant Drive. The building would be set back approximately 123 feet east of Shoreway Road and approximately 93 feet south of Cormorant Drive.[1] Primary vehicular access to the site would be provided via a driveway along Cormorant Road directly across from the

[1] Note that the street grid in the project site vicinity has a northeast-southwest orientation. /For the purposes of this report, U.S. 101 and streets parallel are described as oriented north-south, and Cormorant Drive and streets parallel are described as oriented east-west. The project site is also described as such, with the "northern" border abutting Cormorant Drive, and the "western" border abutting Shoreway Road.

access point to the Nikon Precision, Inc. property (the median would be modified to allow for through traffic from the hotel to Nikon property, as well left turns onto westbound Cormorant Drive). A second entrance would be provided at the northeast corner of the site from an existing parking aisle. A third entrance would be available at the southeast corner of the site.

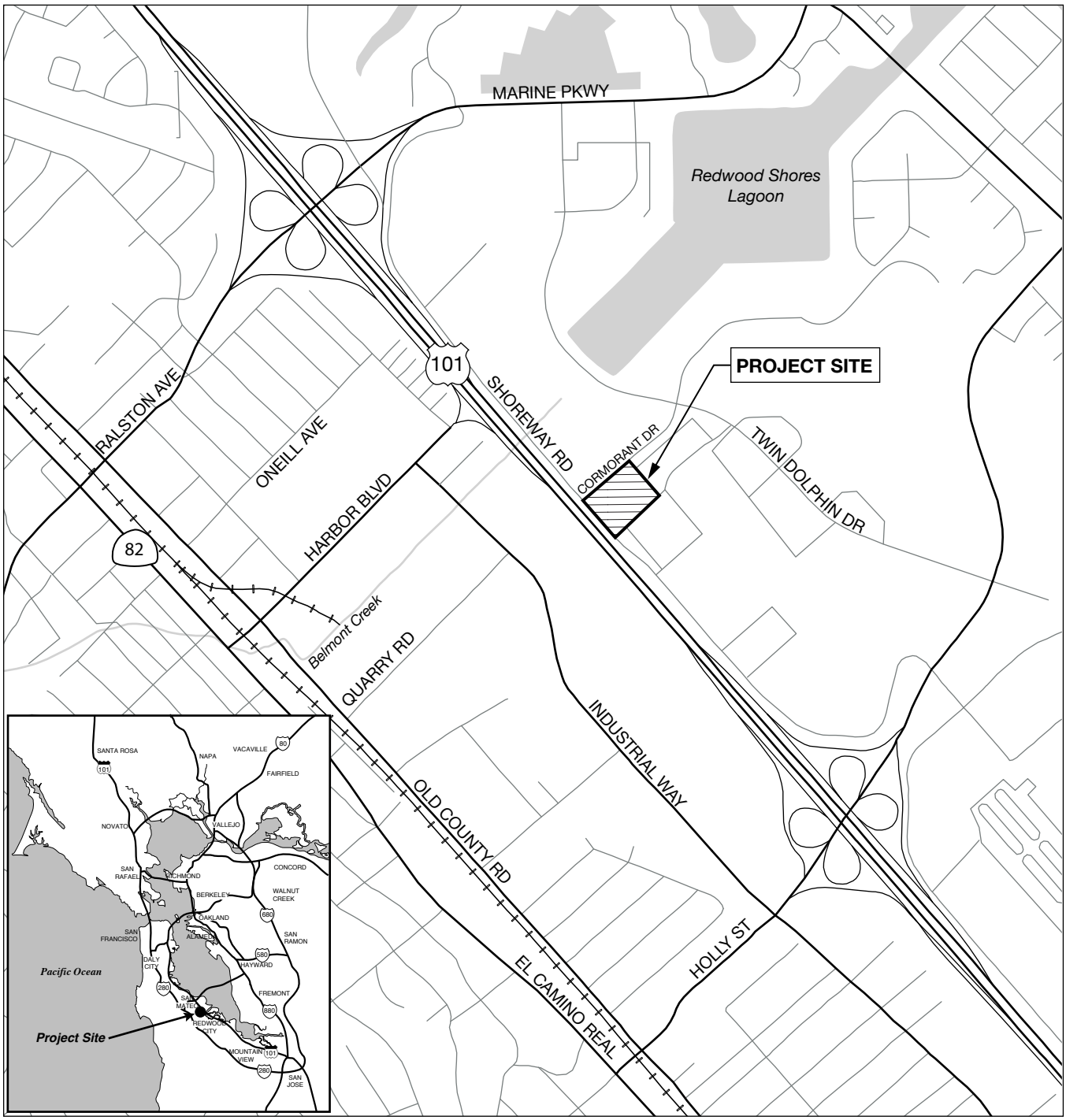
The proposed building would have a footprint of 22,675 sq. ft. and would provide a total building area of 91,465 sq. ft., resulting in a floor area ratio (FAR) of 0.62. In addition to 169 guest rooms, the hotel would include a meeting room, a buffet and bar, a lounge, an exercise room, a swimming pool, and a 1,312-sq. ft. outdoor patio. The building would also provide an employee break room, laundry and linen storage, a kitchen, offices, miscellaneous work areas, electrical and mechanical rooms, and various storage rooms. The project site is currently zoned M-1 Limited Manufacturing and it would be rezoned to C-3 Highway Commercial as part of project approvals.

1.2.1 Project Location and Setting

The project site is located in the southeastern portion of the City of Belmont, at the border of the City of San Carlos and the Redwood Shores area of the City of Redwood City, on the east side of U.S. 101 (see **Figure 1-1**). The square site is Assessor's Parcel No. 040-373-030 and is located at the southeast corner of the intersection of Shoreway Road and Cormorant Drive, approximately 700 feet south of Redwood Shores Lagoon, 0.5 miles north of the San Carlos Airport, and 10 miles south of San Francisco International Airport.

The vacant lot is level, with an elevation of 9 to 11 feet above mean sea level (Krazan, 2014). The surface of the site is covered with weeds interspersed with patches of exposed soil. The subsurface soils consist of 6 to 12 inches of very loose gravelly clayey sand above 4 to 8.5 feet of fill material (Krazan, 2014). A high-voltage electrical transmission tower is located on the western side of the site, near Shoreway Road. The associated electrical line traverses the western side of the site, parallel to Shoreway Road, within a Pacific Gas & Electric (PG&E) easement. An existing aerial view of the site is depicted on **Figure 1-2**.

Primary access to the site would be via Shoreway Road. Adjacent to the project site, Shoreway Road is lined with commercial and light industrial uses one to three stories in height. In addition, existing commercial and office development surrounds the project site. Immediately to the south, fronting on Shoreway Road, is Alvine Pharmaceuticals, Inc., Altreca Inc., and Luidia, Inc. Recology San Mateo County and the Shoreway Environmental Center are south of those developments and consists of a waste handling facility including a transfer station, materials recovery facility, public recycling center and administrative offices. Nikon Precision, Inc. is adjacent to the north side of the project site. The Sofitel San Francisco Bay hotel lies approximately 700 feet north of the project site and Motel 6 and Extended Stay of America hotels are approximately 0.4 miles north of the project site. The west side of U.S. 101, which comprises four travel lanes and one auxiliary lane in each direction, is developed with a variety of offices and automobile repair facilities.



SOURCE: ESA; Rand McNally, 2015

Belmont SpringHill Suites Hotel . 150195

Figure 1-1

Project Location

SOURCE: OTO Development, 2015

Belmont SpringHill Suites Hotel . 150195

Figure 1-2

Aerial Photograph of Project Site

1.3 Project Characteristics

The project would entail construction of a four-story (approximately 57-foot-tall), 169-room hotel surrounded by a surface parking lot for 169 vehicles (see **Figure 1-3**). The ground floor of the hotel would include a public lobby, 28 guest rooms, a meeting room, a lounge and bar, a buffet area, an exercise room, an outdoor swimming pool, and an outside patio. The building would also provide an employee break room, laundry, kitchen, offices, miscellaneous work areas, electrical and mechanical rooms, and various storage rooms. Access to the upper stories of the hotel would be provided by two centrally–located elevators and stairways at the east and south ends of the L–shaped building. The remaining 141 hotel rooms would be located on Floors 2 through 4. (see **Figure 1-4**).

The exterior architecture would have a contemporary design with a distinctive illuminated SpringHill Suites Marriott logo sign distinguishing the front entrance (on the site's northern side) and an identical illuminated sign mounted on the east side, facing Shoreway Road and U.S. 101. Building elevations along Cormorant Drive and Shoreway Road are shown on **Figure 1-5** and **Figure 1-6**. Additional signage would comprise a 10-foot by 4-foot by 8-inch-monument sign on the northwest corner of the project site at the intersection of Shoreway Road and Cormorant Drive. The building would be finished with stucco and decorative plastering and simulated brick/stone at lower level.

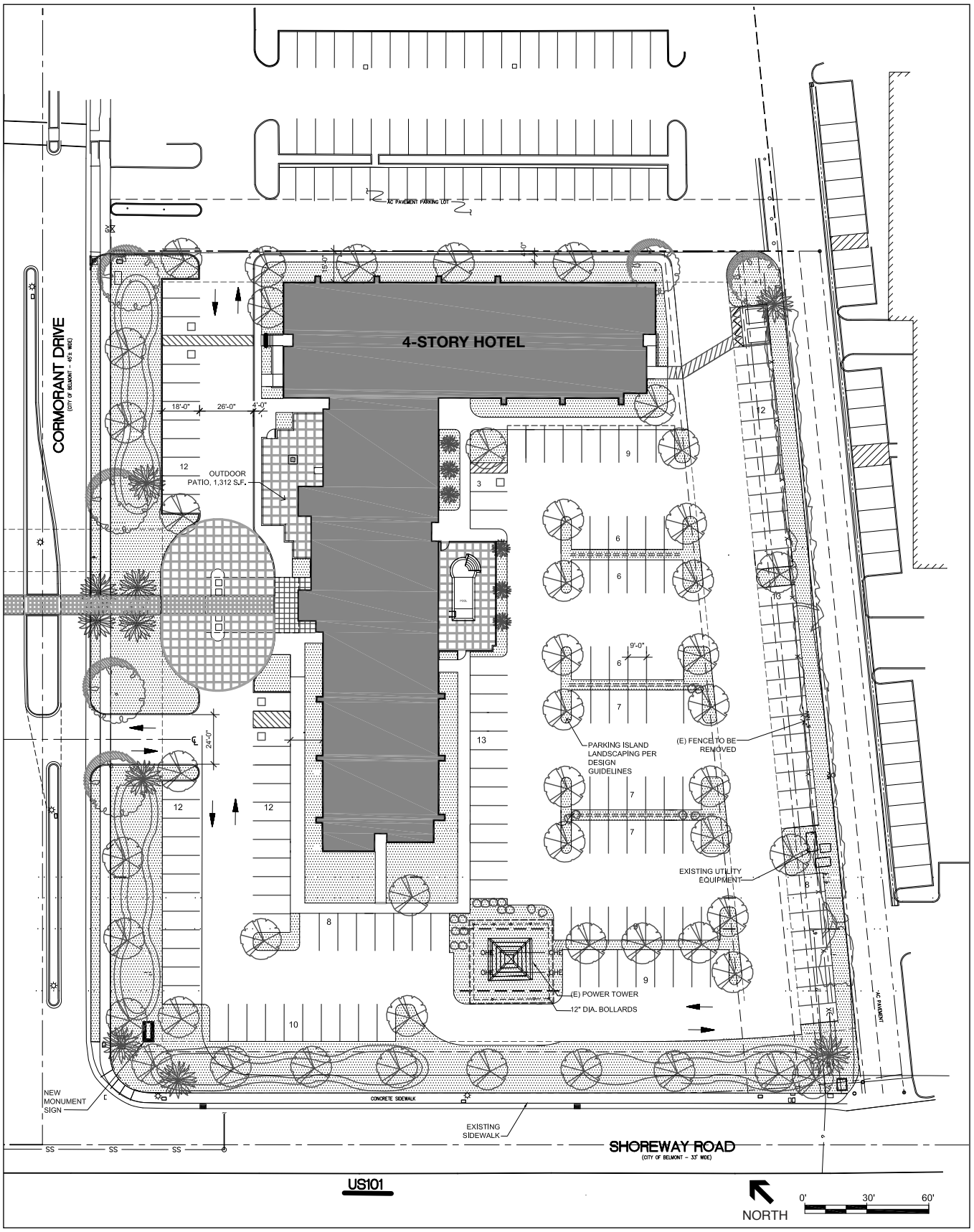
No demolition would occur as there are no existing structures on the project site. However, a wooden fence along the southern edge of the site would be removed. The existing electrical transmission tower would be retained, transmission lines would continue to traverse the western portion of the site, and the PG&E easement would remain in place.

1.3.1 Circulation and Parking

Parking would be located on all four sides of the building. A total of 169 off-street parking spaces would be provided, including 107 full-size spaces, 57 compact spaces, and 5 ADA-accessible spaces. A porte-cochere would cover the primary building entrance on the north side of the building. Vehicles would enter the project site at the two-way driveway on Cormorant Drive across from the existing driveway to the Nikon Precision, Inc. property to the north. The existing median in Cormorant Drive would be modified to allow for access to and from the westbound direction. Upon entering the project site, vehicles could turn right or left onto the two-way internal driveway that encircles the building. Cars could also enter or exit from the two two-way driveways along the eastern edge of the site, which open onto an existing parking lot.

1.3.2 Landscaping

Under the proposed project, all existing vegetation and the one existing tree would be removed from the project site. A Planting Plan has been developed for the project site that would introduce new trees, vegetation. and ground cover (see **Figure 1-7**). This vegetation would be installed along the perimeter of the parking spaces and around the perimeter of the hotel building. The project site is currently almost entirely pervious (except for the concrete supports for the electrical transmission tower). The proposed project would result in 97,950 sq. ft. of new impervious surface.



SOURCE: OTO Development, 2015

Belmont SpringHill Suites Hotel . 150195

Figure 1-3
Site Plan

SOURCE: OTO Development, 2015

Belmont SpringHill Suites Hotel . 150195

Figure 1-4

Ground, Second and Third Floor Plans

South Elevation

East Elevation

SOURCE: OTO Development, 2015

Belmont SpringHill Suites Hotel . 150195

Figure 1-5

South and East Elevations

North (Cormorant Drive) Elevation

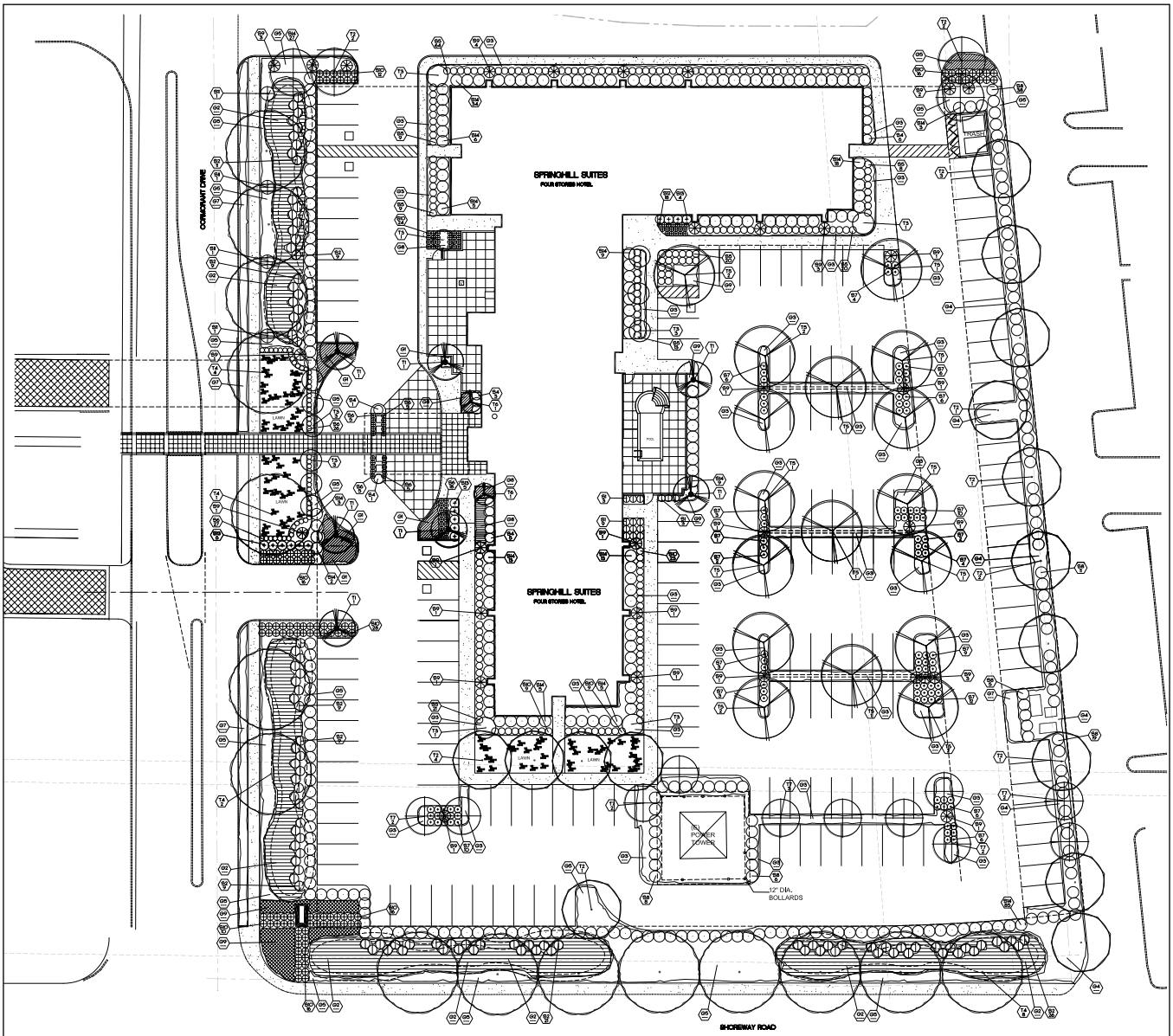
West (Shoreway Road) Elevation

SOURCE: OTO Development, 2015

Belmont SpringHill Suites Hotel . 150195

Figure 1-6

North and West Elevations



PLANT LIST:

KEY	BOTANICAL NAME	COMMON NAME	QTY	SIZE	REMARKS	W.UCOLS
	TREES					
T1	TRACHYCARPUS FORTUNEI	WINDMILL PALM		24"BOX	STANDARD	MEDIUM
T2	MELALUCA QUINQUENERVIA	BROAD LEAVED PAPERBARK		24"BOX	MULTI-TRUNK	LOW
T3	JUNIPERUS C. 'SPARTAN'	SPARTAN JUNIPER		24"BOX	COLUMNAR	LOW
T4	ARBUTUS 'MARINA'	MARINA		24"BOX	STANDARD	LOW
T5	LOPHOSTEMON CONFERTUS	BRISBANE BOX		24"BOX	STANDARD	MEDIUM
T6	AZARA MICROPHYLLA	BOXLEAF AZARA		15 GAL	MULTI-TRUNK	MEDIUM
	SHRUBS					
S1	ROSMARINUS O. 'TUSCAN BLUE'	ROSEMARY		5 GAL		LOW
S2	CHONDROPETALUM TECTORUM	CAPE RUSH		5 GAL		LOW
S3	JUNCUS PATENS	BLUE RUSH		5 GAL		LOW
S4	RHAPHIOLEPIS U. 'MINOR'	YEDDO HAWTHORNE		5 GAL		LOW
S5	DIANELLA C. 'SAGA BLUE'	BLUE FLAX LILY		5 GAL		LOW
S6	LYTHONUM FRUTICOSUM	SEA LAVENDER		5 GAL		MEDIUM
S7	LAVANDULA S. 'OTTO QUAST'	SPANISH LAVENDER		5 GAL		LOW
S8	LOMANDRA L. 'RUSTY GLOW'	RUSTY LOMANDRA		5 GAL		LOW
S9	PHORMIUM 'MARGARET JONES'	NEW ZELAND FLAX		5 GAL		LOW
S10	PENNISETUM ORIENTALE	CHINESE FOUNTAIN GRASS		5 GAL		MEDIUM
S11	ECHIUM CANDICANS	PRIDE OF MADEIRA		5 GAL		LOW
S12	CAREX C. COPPLAND BRONZE FORM	BRONZE HAIR SEDGE		5 GAL		LOW
S13	STRELITZIA REGINAE	BIRD OF PARADISE		5 GAL		MEDIUM
S14	PITTOSPORUM T. 'VARIEGATA'	VARIGATED TOBOCK ORANGE		5 GAL		LOW
	GROUND COVERS					
G1	SENECIO SERICEUS	BLUE CHALKSTICKS	---	1 GAL	24" O.C.	LOW
G2	NATIVE SUPPLY TRATION SOD	SY-DELTA BLUEGRASS CO.	---	SOD		LOW
	NASSELLA PULCHRA	PURPLE NEEDLEGRASS				
	FESTUCA RUBRA	MOLATE FESCUE				
	HORDEUM BRACHYANTHERUM CALIFORNICUM	CALIFORNIA BARLEY				
	HORDEUM BRACHYANTHERUM BRACHYANTHERUM	CALIFORNIA BARLEY				
G3	OSTEOSPERMUM F. 'WHITE'	FREEWAY DAISY	---	2 GAL	24" O.C.	LOW
G4	CORREOSPA 'TEQUILA SUNRISE'	TEQUILA SUNRISE MIRROR PLANT	---	1 GAL	36" O.C.	LOW
G5	ROSMARINUS O. 'LOCKWOOD DE FOREST'	ROSEMARY	---	1 GAL	36" O.C.	LOW
G6	FESTUCA G. 'ELIJAH BLUE'	ELIJAH BLUE FESCUE	---	4"POTS	9" O.C.	LOW
G7	LANTHANTHUS MULTIRADIATUS	ICE PLANT	---	1 GAL	36" O.C.	LOW
G8	OPHIOPOGON P. 'NIGRESCENS'	BLACK MONDO GRASS	---	1 GAL	36" O.C.	MEDIUM
G9	BULBINE F. 'HALLMARK'	ORANGE STALKED BULBINE	---	1 GAL	24" O.C.	LOW

PLANT SYMBOLS

SYM — INDICATES PLANT KEY
XX — INDICATES PLANT QUANTITY

NORTH 0 16' 32'

Belmont SpringHill Suites Hotel . 150195

SOURCE: OTO Development, 2015

Figure 1-7
Planting Plan

1.3.3 Lighting

Exterior lighting would consist of wall- and surface-mounted lighting and recessed lighting (e.g., at building/pedestrian and vehicular entrances), pole-mounted pedestrian scale lights (e.g., in the proposed outdoor spaces and other pedestrian circulation areas), and one-side output wall lighting (for accent and sign lighting) The proposed project would feature pole light fixtures, pathway bollards around the perimeter of the building and in the parking lot.

Additional exterior fixtures would be attached to the sides of the building. Light spill from these fixtures would remain within the project site.

1.3.4 Project Operation

As described above, the building would have 169 guest rooms. The hotel would be operated by SpringHill Suites, a division of Marriott International, Inc. The hotel would be staffed by a general manager, sales staff, maintenance, housekeeping and food service staff for a total of approximately 30 employees, with a maximum of 15 employees on-site at any one time.

The proposed project would include secure enclosed structures to house recycling and trash containers. The project site would be regularly monitored by hotel landscape/maintenance staff to ensure that trash would not collect outside the refuse structures. During construction and operation, trash and other waste would be regularly collected and properly disposed or recycled by a certified waste management company. During hotel operations, hotel management would contract with Recology San Mateo to provide collection services.

Mid-Peninsula Water District (MPWD) water is available to the project using existing waterlines. The project would connect to an existing sanitary sewer main in Shoreway Road. This 6-inch main would be replaced with an 8-inch main for 830 feet to the City's pump station. Drainage would be provided with seven 24-inch catch basins located throughout the parking lot.

1.3.5 Construction

Construction is expected to commence in March 2016 and last for 12 months with project completion in March 2017. The project applicant will require construction contractors to limit standard construction activities as required by the City of Belmont. Such activities are generally limited to between 8:00 a.m. and 5:00 p.m. Monday through Friday and 10:00 a.m. to 5:00 p.m. on Saturdays. No construction activity is allowed on Sundays or Holidays.

Construction activities for the proposed project would include site preparation, grading and soil excavation, drainage and utilities, and building construction. The site would be raised 2 to 3 feet with 1,370 cubic yards of excavation, followed by 6,189 cubic yards of fill imported to the site. The four-story building would be supported on deep foundations (drilled piles or drilled displacement piers) extending below the fill material, at least 10 feet into the stiff soils or 50 feet below the surface. Construction vehicles and equipment required include a concrete truck, material and supplies delivery trucks and trailers, boom vehicles, forklifts, and paving equipment.

The proposed project would not require pile driving. The construction staging area would be located on-site.

1.4 Report Organization

This report is organized as follows:

Section 1, Project Description, provides an introduction to the project with project background and discusses the proposed improvements.

Section 2, Environmental Checklist Form, presents the CEQA Initial Study Environmental Checklist, and analyzes environmental impacts resulting from the project and describes the mitigation measures that would be incorporated into the project to avoid or reduce impacts to less-than-significant levels.

1.5 Other Approvals

- **City of Belmont:** The project site is located within the City of Belmont. For the purpose of the Initial Study, the City is the Lead Agency responsible for preparation of the Initial Study and certification of the Mitigated Negative Declaration, as well as design review and other discretionary planning approvals for the project.
  - The project site General Plan land use designation would change from Light Industrial (IL) to Highway Commercial (CH) as part of project approval.
  - The project site is currently zoned M-1 Limited Manufacturing and would be rezoned to C-3 Highway Commercial as part of project approval.
  - Buildings in the C-3 zoning district have a maximum height of 40 feet. The project applicant would request a variance to allow for construction of the hotel up to 57 feet tall.
- **Redwood Shores Owners Association:** Due to the project site's proximity to the community of Redwood Shores, the City of Redwood City's Redwood Shores Owners Association requires a five-stage approval process for nearby projects, including approval of site use, general massing and building location, and design detail.
- **City/County Association of Governments of San Mateo County (C/CAG) and C/CAG Airport Land Use Committee (ALUC):** The project site is located within the Airport Influence Area (AIA) for San Carlos Airport. The proposed project will need to be referred to the City/County Association of Government of San Mateo County (C/CAG) for a "Consistency Review" with the adopted Airport Land Use Compatibility Plan (ALUCP) for San Carlos Airport.
- **Federal Aviation Administration (FAA):** Based on the location of the project site and the anticipated height of the hotel building, the project applicant should file Form 7460-1, *Notice of Proposed Construction or Alteration* with the Federal Aviation Administration (FAA). The FAA will use information provided in Form 7460-1 and other data to conduct an aeronautical review for the proposed project.

References

Krazan & Associates, Incorporated, *Draft Phase I Environmental Site Assessment, Proposed Springhill Suites Hotel, Shoreway and Cormorant Road, Belmont, California,* November 14, 2014.

Project plans and descriptions.

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SECTION 2
Environmental Checklist – Initial Study

1. **Project Title:** Belmont SpringHill Suites Hotel

2. **Lead Agency Name and Address:** City of Belmont
One Twin Pines Lane, Suite 110, Belmont, CA 94002

3. **Contact Person and Phone Number:** Carlos de Melo, Community Development Director
650-595-7440, cdemelo@belmont.gov

4. **Project Location:** The project is located on Shoreway Road at the corner of Cormorant Drive in Belmont, California. The site is located adjacent to U.S. Highway 101.

5. **Assessor's Parcel Numbers:** 040-373-030

6. **Project Applicant's Name and Address:** Belmont Hotels, LLC
124 Johnson Court, Folsom, CA 95630

7. **General Plan Designation(s):** IL-Light Industrial

8. **Zoning Designation(s):** M-1 Limited Manufacturing

9. **Description of Project:**

   The project applicant, Belmont Hotels, LLC, proposes to construct a 169-room hotel. The four-story hotel would occupy a 147,668-square-foot (sq. ft.) (3.39 acres) lot at Shoreway Road and Cormorant Drive in Belmont, California. The proposed building would have a footprint of 22,675 sq. ft. and would provide a total building area of 91,465 sq. ft. Based on the total area of the site, the building would have a floor area ratio (FAR) of 0.62. In addition to 169 guest rooms, the hotel would include a meeting room, a buffet and bar, a lounge, an exercise room, a swimming pool, and a 1,312-sq. ft. outdoor patio. The building would also provide an employee break room, laundry and linen storage, a kitchen, offices, miscellaneous work areas, electrical and mechanical rooms, and various storage rooms. The project site is currently zoned M-1 Limited Manufacturing and would need to be rezoned as C-3 Highway Commercial.

10. **Other public agencies whose approval is required** (e.g., permits)

    - City of Belmont
    - City/County Association of Governments of San Mateo County (C/CAG)
    - C/CAG Airport Land Use Committee (ALUC)
    - Federal Aviation Administration (FAA)
    - City of Redwood City Redwood Shores Owners Association

2.1 Environmental Factors Potentially Affected

Topics that do not have significant impacts as determined through the analyses in this Initial Study will not be looked at further in the environmental assessment for this project. The analysis in this Initial Study determined that effects associated with Aesthetics, Air Quality, Biological Resources, Cultural Resources, and Noise would involve "Potentially Significant" impacts that would be reduced to "Less than Significant" with incorporation of mitigation measures. The mitigation measures identified in this Initial Study will be carried forward to the Mitigation Monitoring and Reporting Program which must be adopted in connection with project approval to ensure that mitigation measures are implemented.

The proposed project could potentially affect the environmental factor(s) checked below. The following pages present a more detailed checklist and discussion of each environmental factor.

☒ Aesthetics	☐ Agriculture and Forestry Resources	☒ Air Quality
☒ Biological Resources	☒ Cultural Resources	☐ Geology, Soils and Seismicity
☐ Greenhouse Gas Emissions	☐ Hazards and Hazardous Materials	☐ Hydrology and Water Quality
☐ Land Use and Land Use Planning	☐ Mineral Resources	☒ Noise
☐ Population and Housing	☐ Public Services	☐ Recreation
☐ Transportation and Traffic	☐ Utilities and Service Systems	☐ Mandatory Findings of Significance

Determination:

On the basis of this initial study:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, no further environmental documentation is required.

Signature

7/29/15
Date

For: CITY OF BELMONT

2.2 Environmental Checklist

All items on the Initial Study Checklist that have been checked "Less than Significant Impact," "No Impact" or "Not Applicable" indicate that, upon evaluation, the City has determined that the proposed project could not have a significant adverse environmental effect relating to that topic. A discussion is included for those issues checked "Less than Significant Impact" and for most items checked with "No Impact" or "Not Applicable." For all of the items checked "Not Applicable" or "No Impact," the conclusions regarding potential significant adverse environmental effects are based upon field observation, staff experience and expertise on similar projects, and/or standard reference material available. Items on the checklist that have been checked "Less than Significant with Mitigation" indicate that the project would result in potentially significant impacts, but those impacts would be reduced to less-than-significant levels through implementation of mitigation measures identified in this Initial Study. For each checklist item, the evaluation has considered the impacts of the proposed project both individually and cumulatively.

Approach to Cumulative Analysis

Two approaches to a cumulative impact analysis are provided in CEQA Guidelines Section 15130(b)(1): (a) the analysis can be based on a list of past, present, and reasonably foreseeable probable future projects producing closely related impacts that could combine with those of a proposed project, or (b) a summary of projections contained in a general plan or related planning document can be used to determine cumulative impacts. The analyses in this Initial Study employ both the list-based approach and a projections approach, depending on which approach best suits the individual resource topic being analyzed.

For the list-based approach, ongoing projects in proximity to the project site within the City of Belmont and the City of San Carlos were considered. There are no ongoing projects within the City of Redwood City in close enough proximity to the project site to be considered. The projects considered in the cumulative analyses are as follows:

City of Belmont

- 490 El Camino Real, which comprises the demolition of two existing buildings and the construction of a mixed-use project including 73 residential units with 4,990 square feet of retail space.
- 576-600 El Camino Real, which comprises the demolition of existing buildings and the construction of a new 3-story residential-over-commercial development with 32 residential units and 11,000 square feet of retail space.
- The Autobahn Motors Dealership Reconstruction Project, which comprises demolition of the existing 51,006-square-foot Autobahn Motors facility at 700 Island Parkway and construction of a 56,365 square foot structure serving the same general purpose.
- The Clear Channel Outdoor (CCO) Pump Station Billboard project, which comprises construction and operation of one new double-sided outdoor advertising digital billboard at 1385 Shoreway Road.

City of San Carlos

- San Carlos Transit Village, which would comprise 202 multiple-family rental units in six three-story buildings, as well as two 2-story commercial buildings located just north and south of the existing San Carlos Train Station containing a total of 25,800 square feet
- The Wheeler Plaza Development project, which comprises 109 housing units and a two-level public parking structure, and retail space at San Carlos Avenue and Walnut Street.
- The Landmark Hotel Project, which comprises development of the existing buildings and construction of a four-story, extended-stay hotel with 204 guest rooms at 595 Industrial Road.

2.2.1 Aesthetics

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
1.	**AESTHETICS — Would the project:**				
a)	Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d)	Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area?	☐	☒	☐	☐

Discussion

a, b) **Less than Significant.** The project site is located in an urbanized area east of U.S. 101, on a lot bounded by Shoreway Road and Cormorant Drive. There are no scenic vistas in the immediate vicinity of the project site, which is located in an area of urbanized commercial office, light industrial, and transportation-related development. The project site is surrounded by multi-story office and light industrial buildings, which provide the surrounding visual setting. Public views of the project site are available along the U.S. 101, Shoreway Road and Cormorant Drive. There are no state-designated scenic highways in the vicinity of the project site (Caltrans, 2015).

Scenic resources in the project vicinity include long-range views of the Santa Cruz Mountains, views of which are available among intervening developments to the west. Although the San Francisco Bay is in proximity to the project site, it is not visible from the site due to adjacent development.

The proposed project would change the visual character of the site, which is currently vacant, except for the presence of one electrical transmission tower and overhead lines; however, the proposed four-story, 91,465-square foot building would be consistent with existing development in the vicinity in terms of scale, design, and use, and therefore would not result in a significant impact on the visual quality of the site.

Existing foreground views from the project site consist of neighboring multi-story office and light industrial buildings and parking lots. These views are representative of the similar views available from surrounding properties. While the addition of a four-story hotel would obscure some of these views, there are no scenic vistas that could be obscured as a result of the proposed project.

There are no designated scenic vista points in proximity to the project site and, therefore, the project would not displace or obstruct views from a scenic vista point. Therefore, the proposed project would not result in a substantial adverse effect on a scenic vista or scenic resources, and would be ***less than significant***.

Mitigation: None required.

c) **Less than Significant.** The project site is located within an area that is dominated by commercial office and light industrial buildings. The project site is surrounded by multi-story office and light industrial buildings to the north, south and east and a self-storage facility is located across U.S. 101 to the west. Buildings in the vicinity of the project site are of contemporary architectural design, ranging from one to three stories in height and are setback from the street. Each building is surrounded by a landscaped parking lot and separated from the sidewalk by a landscaping strip that features a lawn area planted with mature deciduous and evergreen trees. The project site is currently a vacant lot, except for the presence of one electrical transmission tower and overhead lines. The project would entail construction of a four-story, contemporary design hotel surrounded by a landscaped parking lot, with a landscape buffer on all four sides of the property. Overall, the project site would be improved with the addition of the proposed project because the site, under existing conditions is underutilized. The proposed hotel would be compatible with other buildings in the project vicinity with its contemporary architecture style, height, and bulk.

As described in the Project Description, a distinctive illuminated SpringHill Suites Marriott logo sign would distinguish the front entrance (on the site's northern side) and an identical illuminated sign would be mounted on the east side, facing Shoreway Road and U.S. 101. Additional signage would comprise a 10-foot by 4-foot by 8-inch-monument sign on the northwest corner of the project site at the intersection of Shoreway Road and Cormorant Drive. Sign design will be reviewed by the City pursuant to Section 23 of the Zoning Ordinance.

The property would be completely landscaped from the curb line to the setback line (with the exception of sidewalks and driveways), and side lot setbacks would also be landscaped or paved. Importantly, all landscaped areas would be maintained, cleaned, and free from weeds and debris at all times. The landscape plan for the proposed hotel is shown in Figure 1-7 and would introduce approximately new trees, shrubs, and ground cover. This vegetation would be installed along the perimeter of the lot, throughout the parking lot and around the perimeter of the hotel building.

Although visual quality is subjective, given that the proposed project would be comparable to adjacent existing development, it can be concluded that the proposed hotel would not result in a substantial negative aesthetic effect, and that it would not substantially degrade the visual character of the site and its surroundings. Therefore, the project's impact on visual quality and character would be ***less than significant***.

Mitigation: None required.

d) **Less than Significant.** The proposed building façades would be finished with stucco and decorative plastering and simulated brick/stone at lower level. The stucco and plastering would be dark earth-tone with articulations of the building in a lighter color to break-up the mass of the building.

The project site is located in a built-out urban environment that includes existing sources of light and glare associated with nearby land uses. Nearby sources of light include exterior lighting on commercial and light industrial buildings, street lighting on the adjacent U.S. 101, Shoreway Road and Cormorant Drive, passing vehicle headlights, and outdoor lighting on surface parking lots and buildings. Currently, there are no existing sources of light on the project site.

The proposed project would develop the vacant site, and generate night lighting, which would be visible from the surrounding area. With respect to glare, the proposed hotel would not be covered in reflective surfaces and would not include oversized windows or large expanses of reflective glass. The proposed project would be required to comply with the City of Belmont Zoning Code standards and regulations relating to lighting, and the project would require City Planning Commission Design Review approval.

Interior nighttime lighting of the hotel would be contained by window coverings, fixture shades, and intervening building surfaces, and would not constitute a source of substantial nighttime glare. Exterior lighting would include pole light fixtures located around the perimeter of the building, pathway bollard lights around the interior courtyard and entrance area, and exterior fixtures attached to the sides of the building. These lights would be designed with downward-pointing lights, cut-off fixtures, dimmers, side shields, and visors.

The proposed project would develop the vacant site, and generate night lighting and glare, which would be visible from the surrounding area; however, the new lighting would be comparable to that from existing buildings in the vicinity, and would not exceed lighting levels common in urban areas. The amount and location of onsite lighting would be addressed during the City's Design Review process as required by **Mitigation Measure AES-1**. For purposes of safety and security, onsite light fixtures would be required to shield the light source, aiming the cone of light directly downward, preventing direct viewing of the bulb from offsite receptors, while illuminating the intended location. The proposed project would not introduce any design features that would result in substantial light and glare during daytime and nighttime periods, nor would the proposed project require the construction of, or use of, any high-intensity lighting that would affect neighboring properties. Mitigation Measure AES-1 would eliminate spillage of light and glare onto adjacent properties. While the project would generate an incremental increase in light generated on the site compared to existing conditions, the proposed project would not generate a substantial new source of light and glare that would adversely affect day or nighttime views in the area, therefore the impact would be ***less than significant***.

> **Mitigation: Mitigation Measure AES-1:** A Lighting Design Plan, that describes the location and types of fixtures as well as lighting intensity measured in foot-candles, shall be submitted to the City of Belmont Planning Department for review and approval. Low intensity and indirect sources of light shall be used, where feasible. Bright light sources shall not be permitted unless specifically approved. Lighting shall be limited to areas that would be in operation during nighttime hours

and on-demand lighting systems shall be preferred. All lighting installations shall be designed and installed to be fully shielded (full cutoff) and to minimize glare and obtrusive light by limiting outdoor lighting that is misdirected, excessive, or unnecessary, except as in the exceptions below, and shall have maximum lamp wattage of 250 watts for commercial lighting, or 100 watts incandescent. Lighting that is exempt includes:

- Lighting in swimming pools and other water features.
- Exit signs and other illumination required by building codes.
- Lighting for stairs and ramps, as required by the building code.
- Signs that are regulated by the sign code.
- Holiday and temporary lighting (less than thirty days use in any 1 year).
- Low-voltage landscape lighting, but such lighting should be shielded in such a way as to eliminate glare and light trespass.

In addition, all buildings and structures shall use non-reflective materials and be painted with non-reflective paint.

It is noted that the project applicant has already prepared this plan and submitted to the City for review.

Cumulative Impacts

Less than Significant with Mitigation. Operation of the proposed project, in combination with past, present, and reasonably foreseeable future projects in the vicinity, could result in a significant cumulative impact on aesthetic resources due to increases in light and glare.

The geographic scope of potential cumulative impacts on aesthetics includes the project site vicinity and nearby vicinities. All cumulative projects identified in the vicinity have the potential to increase light and glare over existing conditions. These projects could increase the total amount of light and glare in the area and thus contribute to a potentially significant cumulative impact. Cumulative projects in the vicinity, in both the City of Belmont and the City of San Carlos, would undergo design review prior to project approval to ensure light and glare conditions are minimized. With implementation of Mitigation Measure AES-1 the proposed project's contribution to such impacts would be considered incremental and less than considerable. The cumulative impact would be ***less than significant***.

Mitigation: Mitigation Measure AES-1, above.

References

California Department of Transportation (Caltrans), Designated State Scenic Highways: San Mateo County, available online: http://www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm, accessed July 5, 2015.

2.2.2 Agricultural and Forest Resources

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
2. AGRICULTURAL AND FOREST RESOURCES — In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. **Would the project:**				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Discussion

a - e) **No Impact.** The project site is located in an urbanized area, as defined by CEQA *Guidelines,* Section 21071. The project site does not include active agricultural uses, nor is the site zoned for agricultural uses. The project site is designated by the California Department of Conservation as urban and built-up land defined as "land occupied by structures with a building density of at least one unit to one and one-half acres" as shown on the Important Farmland Map for San Mateo County (2010). The project would not include, nor promote the modification to, any existing active agricultural uses, nor is the site zoned for agricultural uses. Furthermore, the proposed project would not contribute to, nor result in the loss or conversion of forest land, nor result in any impacts to farmland or any property subject to Williamson Act. The proposed project would result in ***no impact*** to agricultural and forest resources.

Mitigation: None required.

Cumulative Impacts

Eastern San Mateo County is characterized by being primarily urbanized with little to no agricultural land. The project site is surrounded by industrial and commercial use, and therefore would not combine with past, present or reasonably foreseeable future projects to result in significant impacts to agricultural and forest resources. The cumulative impact would be ***less than significant***.

Mitigation: None required.

References

California Department of Conservation, *San Mateo County Important Farmland Map*, 2010.

2.2.3 Air Quality

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
3. AIR QUALITY — Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. **Would the project:**				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☒	☐	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☒	☐	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☒	☐	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

Setting

Under amendments to the federal Clean Air Act (CAA), the U.S. Environmental Protection Agency (USEPA) has classified air basins or portions thereof as either "attainment" or "nonattainment" for each criteria air pollutant, based on whether or not the national standards have been achieved. The California CAA, which is patterned after the federal CAA, also requires areas to be designated as "attainment" or "nonattainment" for the state standards. Thus, areas in California have two sets of attainment / nonattainment designations: one set with respect to the national standards and one set with respect to the state standards. The San Francisco Bay Area Air Basin (Bay Area) is currently designated as a nonattainment area for state and national ozone standards, state particulate matter (PM_{10} and $PM_{2.5}$) standards, and federal $PM_{2.5}$ (24-hour) standard.

The Bay Area Air Quality Management District (BAAQMD) is the regional air quality authority in the project area. The most recently adopted air quality plan for the San Francisco Bay Area is the *Bay Area 2010 Clean Air Plan* (BAAQMD, 2010). The 2010 Clean Air Plan (2010 CAP) is an update to the BAAQMD 2005 Ozone Strategy to comply with State air quality planning requirements. The 2010 CAP also serves as a multi-pollutant air quality plan to protect public health and the climate. The 2010 CAP control strategy includes revised, updated, and new measures in the three traditional control measure categories, including stationary source measures, mobile source measures, and transportation control measures. In addition, the 2010 CAP identifies two new categories of control measures, including land use and local impact measures, and energy and climate measures.

BAAQMD adopted updated *CEQA Air Quality Guidelines*, including thresholds of significance in May 2011. The Air Quality Guidelines advise lead agencies on how to evaluate potential air quality impacts, including establishing quantitative and qualitative thresholds of significance. The thresholds BAAQMD adopted were set aside by an Alameda County Superior Court ruling in March 2012. In May 2012, BAAQMD updated its CEQA Air Quality Guidelines to continue to provide direction on recommended analysis methodologies, but without recommended quantitative significance thresholds. In August 2013, the First District Court of Appeal reversed the Superior Court judgment and upheld the BAAQMD's CEQA thresholds. This case is now pending before the California Supreme Court, specifically with respect to the question of whether CEQA requires consideration of impacts of existing environmental conditions on residents/users of a proposed project. As of the date of this document, BAAQMD has not formally re-instated the thresholds.

The air quality impact analysis below uses the previously-adopted 2011 thresholds of the BAAQMD to determine the potential impacts of the project. While the significance thresholds adopted by BAAQMD in 2011 are not currently recommended by the BAAQMD, these thresholds are based on substantial evidence identified in BAAQMD's 2009 *Justification Report* (BAAQMD, 2009) and are therefore used within this document.

For the purposes of this air quality analysis, sensitive receptors are defined as facilities and land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples include schools, hospitals, and daycare centers. Residential areas are also considered sensitive to poor air quality because people usually stay home for extended periods of time, which results in greater exposure to ambient air quality. The project site is located in the City of Belmont in San Mateo County. The surrounding properties are commercial and office uses.

Discussion

a) **Less than Significant with Mitigation.** The 2010 CAP is a roadmap showing how the San Francisco Bay Area will achieve compliance with the State one-hour ozone standard as expeditiously as practicable, and how the region will reduce transport of ozone and ozone precursors to neighboring air basins. The control strategy includes stationary source control measures to be implemented through BAAQMD regulations; mobile source control measures to be implemented through incentive programs and other activities; and transportation control measures to be implemented through transportation programs in cooperation with the Metropolitan Transportation Commission (MTC), local governments, transit agencies, and others. The 2010 CAP also represents the Bay Area's most recent triennial assessment of the region's strategy to attain the State one-hour ozone standard.

BAAQMD guidance states that "if approval of a project would not result in significant and unavoidable air quality impacts, after the application of all feasible mitigation, the project would be considered consistent with the 2010 CAP." As indicated in the discussion of criteria "b", "c", and "d" below, the project would not result in significant and unavoidable air quality impacts. Construction-related fugitive dust emissions would be less than significant with implementation of mitigation. Construction-related emissions of reactive

organic gases (ROG), nitrogen oxides (NOx), exhaust PM_{10}, and exhaust $PM_{2.5}$ emissions would be less than significant without mitigation. Long-term operational emissions would be less than significant without mitigation.

Mitigation Measures: Implement Mitigation Measure AIR-1.

b) **Less than Significant with Mitigation.** The project would result in the generation of criteria pollutants and toxic air contaminants (TACs) during short-term construction activities. In regards to long-term operations, the project would result in criteria pollutant emissions from sources including on-road vehicles and onsite area and energy sources (e.g., natural gas combustion for space and water heating, landscape maintenance, and use of consumer products such as hairsprays, deodorants, cleaning products). However, since the proposed project is the development of a hotel, it would not be a source of substantial TACs. These potential impacts are assessed below.

Construction

Criteria Air Pollutants

As described in the *Project Description*, the project applicant proposes to construct a four-story, 169-room hotel on an approximately 3.39-acre (147,668 sq. ft.) parcel southeast of the intersection of Shoreway Road and Cormorant Drive. A total of 169 off-street surface parking spaces would be provided. Approximately 1,370 cubic yards of soil would be exported and 6,189 cubic yards of soil would be imported. Since there are no existing structures on the project site, demolition would not be required. Project construction is expected to commence in March 2016 with completion in March 2017.

Project-related excavation, grading, and other construction activities at the project site may cause wind-blown dust that could generate particulate matter into the atmosphere. Fugitive dust includes not only PM_{10} and $PM_{2.5}$ but also larger particles that can represent a nuisance impact. For mitigation of fugitive dust emissions, BAAQMD recommends using specific best management practices (BMPs), which has been a practical and effective approach to control fugitive dust emissions. The guidelines note that individual measures have been shown to reduce fugitive dust by anywhere from 30 percent to more than 90 percent and conclude that projects that implement construction BMPs will reduce fugitive dust emissions to a less-than-significant level. To ensure implementation of BMPs, they are identified herein as a mitigation measure.

Project-related construction would generate air emissions through the use of heavy-duty construction equipment, from vendor trucks, and from construction workers traveling to and from the project site. Mobile source emissions, primarily NOx, would be generated from the use of construction equipment, such as excavators, bulldozers, wheeled loaders, and fork lifts. During the finishing phase, paving operations and the application of asphalt, architectural coatings (i.e., paints) and other building materials would release ROG. The assessment of construction air quality impacts considers each of these sources, and recognizes that construction emissions can vary substantially from day to day,

depending on the level of activity, the specific type of operation, and (for dust) the prevailing weather conditions.

The CalEEMod model (version 2013.2.2) was used to quantify construction emissions associated with off-road equipment, paving, architectural coatings, on-road worker vehicle emissions and vendor delivery trips. Unmitigated and mitigated construction-related criteria pollutant exhaust emissions for the project are presented in **Table 2-1**. The estimated emissions consider the following basic construction phases: site preparation; grading; drainage/utilities/subgrade; building construction; architectural coatings; and paving.

TABLE 2-1
AVERAGE DAILY CONSTRUCTION-RELATED POLLUTANT EMISSIONS (pounds/day)[a]

Scenario	ROG	NOx	Exhaust PM10[b]	Exhaust PM2.5[b]
Unmitigated Emissions	5.9	48.0	2.3	2.2
BAAQMD Construction Threshold	54	54	82	54
Significant Impact?	No	No	No	No

[a] Emissions include results modeled with CalEEMod. Total construction emissions over the duration of construction were divided by the active days of construction in order to determine the average daily construction emissions. Additional data and assumptions are described in Appendix AQ.

[b] BAAQMD's construction-related significance thresholds for PM10 and PM2.5 apply to exhaust emissions only and not to fugitive dust.

As shown in Table 2-1, construction-related emissions of ROG, NOx, PM_{10}, and $PM_{2.5}$ would not exceed the BAAQMD daily significance thresholds during construction. The proposed project would have a ***less-than-significant impact*** in relation to regional construction emissions.

Toxic Air Contaminants and $PM_{2.5}$

Construction of the project would result in short-term diesel exhaust emissions (DPM), which are TACs, from onsite heavy-duty equipment. Project construction would generate DPM emissions from the use of off-road diesel equipment required for construction activities. Exposure of sensitive receptors is the primary factor used to determine health risk. Exposure is a function of the concentration of a substance or substances in the environment and the extent of exposure that person has with the substance. A longer exposure period would result in a higher exposure level. Thus, the risks estimated for a maximally exposed individual are higher if a fixed exposure occurs over a longer period of time. According to the Office of Environmental Health Hazard Assessment (OEHHA), health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 70-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the project. Thus, the duration of the proposed construction activities (assumed 352 active days) would only constitute a small percentage of the total 70-year exposure period. OEHHA recommends that a minimum exposure duration of 2 years be assumed for health risk assessment of short-term projects, such as construction. However, in this case, the assumption of a

2-year exposure would overstate potential health risks. Since nearby land uses (commercial and office) are not considered sensitive receptors and the duration of project construction would be short-term, DPM from construction activities is not anticipated to result in the exposure of receptors to levels that exceed applicable standards. This impact would be ***less than significant***.

Operations

Criteria Air Pollutants

Project site development would result in an increase in criteria air pollutant and precursor emissions—such as ROG, NOx, PM_{10}, and $PM_{2.5}$—from a variety of emissions sources, including onsite area and energy sources and mobile on-road sources. Exhaust emissions from on-road vehicle traffic were calculated using the latest version of the CalEEMod program, which includes the EMFAC2011 emission factors for on-road vehicles.

Table 2-2 summarizes the average daily mobile, energy, and area emissions of criteria pollutants that would be generated by project development and compares the emissions to BAAQMD thresholds. **Table 2-3** summarizes the annual emissions from project operations. As indicated in Tables 2-2 and 2-3, project-related net operational emissions of ROG, NOx, PM_{10}, and $PM_{2.5}$ would not exceed the BAAQMD significance thresholds during operations and thus the project would have a ***less-than-significant*** impact in relation to regional operational emissions.

TABLE 2-2
DAILY OPERATIONAL-RELATED POLLUTANT EMISSIONS (pounds/day)[a]

Scenario	ROG	NOx	PM10	PM2.5
Project Unmitigated Emissions – Year 2017	7.3	5.0	5.4	1.5
BAAQMD Operational Threshold	54	54	82	54
Significant Impact?	No	No	No	No

[a] Emissions include results modeled with CalEEMod for project operations during the Winter season. Trip generation information was based on ITE data and the default fleet mix was adjusted to represent the automotive and delivery truck categories applicable to the executive hotel land use, based on professional experience. Additional data and assumptions are in Appendix AQ.

TABLE 2-3
ANNUAL OPERATIONAL-RELATED POLLUTANT EMISSIONS (tons/year)[a]

Scenario	ROG	NOx	PM10	PM2.5
Project Unmitigated Emissions – Year 2017	1.2	0.8	0.8	0.2
BAAQMD Operational Threshold	10	10	15	10
Significant Impact?	No	No	No	No

[a] Emissions include results modeled with CalEEMod for annual project operations. Trip generation information was based on ITE data and the default fleet mix was adjusted to represent the automotive and delivery truck categories applicable to the executive hotel land use, based on professional experience. Additional data and assumptions are in Appendix AQ.

In regards to localized carbon monoxide (CO) concentrations, according to the 2011 thresholds of the BAAQMD, a project would result in a less-than-significant impact if the following screening criteria are met:

1. The project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans.

2. The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.

3. The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

The project would generate new traffic trips but would comply with these screening criteria. Based on the BAAQMD's criteria, project-related traffic would not exceed CO standards and therefore, no further analysis was conducted for CO impacts. This impact would be considered ***less than significant*** on a project-level and cumulative basis.

The long-term operation of the proposed project would not result in emissions of toxic air emissions. The major source of TACs in the vicinity of the project would be from motor vehicle traffic on U.S. 101. Patrons of the hotel would not be exposed to long-term TACs due to the transient nature of the land use. Therefore, operation of the project would result in ***less-than-significant*** exposure and risk to hotel patrons.

Implementation of Mitigation Measure AIR-1 would ensure that fugitive dust emissions would be reduced to a ***less-than-significant*** level during construction. Construction related ROG, NOx, exhaust PM_{10}, and exhaust $PM_{2.5}$ emissions would be ***less than significant*** without mitigation. Operational emissions would be ***less than significant*** without mitigation.

> **Mitigation Measure AIR-1:** The following BAAQMD Best Management Practices for fugitive dust control will be required for all construction activities within the project area. These measures will reduce fugitive dust emissions primarily during soil movement, grading and demolition activities, but also during vehicle and equipment movement on unpaved project sites:
>
> 1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
>
> 2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
>
> 3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.

4. All vehicle speeds on unpaved roads shall be limited to 15 mph.

5. All streets, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.

6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of CCR). Clear signage shall be provided for construction workers at all access points.

7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.

8. A publicly visible sign shall be posted with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.

c) **Less than Significant with Mitigation.** According to BAAQMD, no single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards for regional criteria pollutants. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. There are many projects throughout San Francisco Bay area that have been identified as having significant and unavoidable operational and construction-related regional pollutant impacts. Consequently, for assessment of cumulative regional pollutant impacts, BAAQMD has developed a methodology of assessing whether a project would have a cumulatively considerable contribution. According to the BAAQMD *Justification Report*, if a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions (BAAQMD, 2009).

As described in criterion "b" above, criteria pollutant emissions generated by short-term construction would be less than significant with mitigation implementation. Long-term operations of the project would not exceed the BAAQMD significance thresholds. Thus, the project would have a ***less-than-significant*** cumulative impact in relation to regional emissions. In addition, project-related traffic would not exceed CO standards and would result in a ***less-than-significant*** cumulative impact in relation to localized CO. The long-term operation of the proposed project would not result in any sources of toxic air emissions.

Mitigation: Implement Mitigation Measure AIR-1.

d) **Less than Significant with Mitigation.** As indicated in the discussion of criteria "b" above, the project would not result in significant and unavoidable localized air quality impacts associated with TACs, CO, or fugitive dust. Construction-related fugitive dust emissions would be ***less than significant*** with implementation of mitigation. TACs

generated during construction, as well as long-term operational emissions of TACs and CO, would be ***less than significant*** without mitigation.

Mitigation: Implement Mitigation Measure AIR-1.

e) **Less than Significant.** BAAQMD has identified typical sources of odor in the *CEQA Air Quality Guidelines*, a few examples of which include manufacturing plants, rendering plants, coffee roasters, wastewater treatment plants, sanitary landfills, and solid waste transfer stations. While sources that generate objectionable odors must comply with air quality regulations, the public's sensitivity to locally produced odors often exceeds regulatory thresholds. The project would not include uses that have been identified by BAAQMD as potential sources of objectionable odors. The impact would be ***less than significant***.

Mitigation: None required.

Cumulative Impacts

As stated above, no single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards for regional criteria pollutants in the Bay Area. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. The cumulative impact analysis is provided under the discussion for (c), above.

References

Bay Area Air Quality Management District (BAAQMD), 2009. *Revised Draft Options and Justification Report California Environmental Quality Act Thresholds of Significance*, October 2009.

Bay Area Air Quality Management District (BAAQMD), 2010. *Bay Area 2010 Clean Air Plan*, adopted September 15, 2010. Available at http://www.baaqmd.gov.

Bay Area Air Quality Management District (BAAQMD), 2012, *BAAQMD CEQA Guidelines, California Environmental Quality Act Air Quality Guidelines,* May 2012, http://www.baaqmd.gov/pln/ceqa/ceqa_guide.pdf.

2.2.4 Biological Resources

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
4.	**BIOLOGICAL RESOURCES — Would the project:**				
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c)	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Discussion

Reconnaissance Survey

Biological resources within the proposed project site were verified by an ESA biologist during a field reconnaissance survey on June 27, 2015. Special-status species lists were derived from the California Natural Diversity Database (CNDDB), USFWS, and CNPS for the regional project vicinity (i.e., the San Mateo, Woodside, Redwood Point, and Palo Alto U.S. Geographical Survey (USGS) 7.5-minute topographic quadrangles). The field reconnaissance consisted of a pedestrian survey within the proposed project site's boundary and visual observations of the adjacent environments within 500 feet. Field surveys focused on identifying habitat for special-status plant and wildlife species. General habitat conditions were noted and incidental species observations were recorded. The findings of the reconnaissance survey were used in conjunction with review of literature and database queries to compile the list of special-status species that may occur at the project site and to characterize the local project setting, described below.

Vegetation Communities and Habitat within the Project Site

The proposed project site consists of a mowed 3.39-acre lot covered in non-native grasses with few other herbs and forbs that is surrounded by urban infill consisting of office buildings, parking lots, and the U.S. 101 highway corridor. Vegetation on the ruderal lot identified by the ESA biologist during the site visit was primarily foxtail barley *(Hordeum murinum* ssp. *leporinum*) and slender oat (*Avena barbata*) with common knotweed (*Polygonum arenastrum*), bristly ox tongue (*Picris echioides*), black mustard (*Brassica nigra*), fennel (*Foeniculum vulgare*), cheeseweed (*Malva parviflora*), and stinkwort (*Dittrichia graveolens*); all of which are non-native or invasive species, not conducive to supporting habitats that favor sensitive species, and are typical of urban settings. Slight topographical depressions occur along the east, south, and southwest portions of the site that appear to have originated from vehicle access in these areas when the ground was wet. Vegetation within these depressions are also non-native species including cut leaf plantain (*Plantago coronopus*), slenderleaf iceplant (*Mesembryanthemum nodiflorum*), and Australian saltbush (*Atriplex semibaccata*). One immature Canary Island date palm (*Phoenix canariensis*) grows adjacent to a PG&E transmission tower on the west side of the site.

Wildlife species utilizing urban areas must be able to tolerate the presence of humans and their activities and are typically generalists, capable of utilizing the limited food sources available, such as garbage and horticultural plants and their fruit. Urban wildlife species found in the project area may include common raven (*Corvus corax*), northern mockingbird (*Mimus polyglottos*), house finch (*Haemorhous mexicanus*), house sparrow (*Passer domesticus*), rock pigeon (*Columba livia*), European starling (*Sturnus vulgaris*), raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), Norway rat (*Rattus norvegicus*), Virginia opossum (*Didelphis virginiana*), and feral cats. Some exceptions to the generalist rule are red-tailed hawk (*Buteo jamaicensis*), which prey on rodents, and Cooper's hawk (*Accipiter cooperii*) and peregrine falcon (*Falco peregrinus anatum*), which prey almost exclusively on small to medium-sized birds. Vegetation at the site appears to be regularly mowed, thereby minimizing foraging or cover opportunities for small mammals or reptiles within the project site.

Special-Status Species

Special-status species lists were derived from the California Natural Diversity Database (CNDDB), USFWS, and CNPS for the regional project vicinity (i.e., the San Mateo, Woodside, Redwood Point, and Palo Alto U.S. Geographical Survey (USGS) 7.5-minute topographic quadrangles). The potential for the project site to support special-status plant or wildlife species was assessed using database results and the June 27, 2015, reconnaissance survey. **Table 2-4** identifies regionally-occurring special-status plant and animals, their preferred habitats and plant blooming periods, with potential to occur in the study area (ESA, 2015). The project study area is defined as relevant areas of similar habitat composition surrounding the project site. It was then determined whether there is a low, moderate, or high potential for species occurrence in the study area of project site based on previous special-status species record locations, known range, and current site conditions. Only species with a moderate or high potential for occurrence are discussed further in this section. Several of the species which require specialized habitat not found within the project site, including all special-status fish and branchiopod species, were eliminated from further discussion.

TABLE 2-4
SPECIAL-STATUS SPECIES CONSIDERED IN EVALUATION OF THE SHOREWAY HOTEL PROJECT

Common Name *Scientific Name*	Listing Status USFWS/ CDFW/Other	Habitat Description / Blooming Period	Potential to Occur in the Study Area
SPECIES LISTED OR PROPOSED FOR LISTING			
Invertebrates			
San Bruno elfin butterfly *Callophrys mossii bayensis*	FE/--/--	Coastal scrub and bunchgrass grassland habitats, with larval foodplant, *Sedum spathulifolium*; adults nectar on L*omatium utriculatum, Achillea millefolium, Arabis blepharophylla, Erysimum franciscanum, Ranunculus californicus,* and *Fragaria californica* Period of Identification: March-April	**Low.** Suitable habitat and supportive host plant not found in the study area.
Bay checkerspot butterfly *Euphydryas editha bayensis*	FT/--/--	Native grasslands on serpentine soils in San Francisco Bay area. Host plants: *Plantago erecta* (primary); *Castilleja densiflorus* and *C. exserta* Period of identification: March - May	**Low.** Suitable habitat and supportive host plant not found in the study area.
Mission blue butterfly *Plebejus icarioides missionensis*	FE/--/--	Grasslands and coastal scrub with larval food plants (*Lupinus albifrons*, *L. variicolor* and *L. formosus*) Period of identification: March-June (adults)	**Low.** Suitable habitat and supportive host plant not found in the study area.
Myrtle's silverspot butterfly *Speyeria zerene myrtleae*	FE/*/--	Host plants include *Grindelia hirsutula, Abronia latifolia, Mondardella, Cirsium vulgare, Erigeron glaucus* where found on the San Francisco and Marin peninsulas.	**Low.** Suitable habitat and supportive host plant not found in the study area.
Birds			
Western snowy plover *Charadrius nivosus nivosus*	FT/CSC/--	Nest on coasts and estuaries on dune-backed beaches and salt pans at lagoons/estuaries.	**Low (nesting).** Although the species is present regionally, it is unlikely to nest or forage in the study area.
White-tailed kite *Elanus leucurus*	--/FP/--	Foothills and valleys with oaks, rivers, and marshes; open woodland, desert grassland.	**Low.** Although the species is present regionally, it is unlikely to nest or forage in the study area.
American peregrine falcon *Falco peregrines anatum*	FD, BCC/FP/--	Wetlands, lakes, rivers, or other water bodies. Also utilizes human-made structures.	**Moderate (nesting).** This species is documented nesting near the study area in similar urban settings.
California least tern *Sterna antillarum browni*	FE/CE/--	Open beaches free of vegetation along the California coast.	**Low.** Suitable habitat not present in the study area; historically nested at nearby salt evaporation ponds.

TABLE 2-4 (Continued)
SPECIAL-STATUS SPECIES CONSIDERED IN EVALUATION OF THE SHOREWAY HOTEL PROJECT

Common Name *Scientific Name*	Listing Status USFWS/ CDFW/Other	Habitat Description / Blooming Period	Potential to Occur in the Study Area
OTHER SPECIAL-STATUS SPECIES			
Invertebrates			
Monarch butterfly *Danaus plexippus* (wintering sites)	--/*/--	Eucalyptus groves (winter sites). Period of identification: Winter	**Low.** Few eucalyptus occur in the study area though no wintering populations are previously documented.
Birds			
Northern harrier *Circus cyaneus*	--/CSC/--	Nests in salt or freshwater wetlands, forages over wetlands, annual grasslands.	**Low (nesting).** Suitable habitat occurs east of the study area in coastal saltmarshes.
Great blue heron *Ardea herodias*	--/CSC/--	Rookery sites in close proximity to foraging areas: marshes, lake margins, tide-flats, rivers and streams, wet meadows.	**Low.** Suitable habitat for foraging or roosting is not found in the study area.
Short-eared owl *Asio flammeus*	--/CSC/--	Open, flat, treeless terrain. Marshes, grasslands, or fields.	**Low.** Suitable habitat for foraging or roosting is not found in the study area.
Western burrowing owl *Athene cunicularia*	BCC/CSC/--	Open grasslands and shrublands where perches and existing rodent burrows are available	**Low.** The study area does not contain prey base for burrowing owl and species unlikely to occur due to human activity.
Saltmarsh common yellowthroat *Geothlypis trichas sinuosa*	BCC/CSC/--	Requires thick, continuous cover down to water surface for foraging; tall grasses, tule patches, willows for nesting.	**Low.** Suitable habitat not found in the study area; historically nested at nearby bay marshlands.
Alameda song sparrow *Melospiza melodia pusillula*	--/CSC/--	Salt marshes of eastern and south San Francisco Bay.	**Low.** Suitable habitat not found in study area and species range is outside of the study area.
Black-crowned night heron *Nycticorax nycticorax*	--/*/--	Lowland and foothill areas. Nests in dense emergent wetlands and dense-foliaged trees.	**Low.** Suitable habitat for foraging or roosting is not found in the study area.
Mammals			
Pallid bat *Antrozous pallidus*	--/CSC/ WBWG High	Most common in open, dry habitats with rocky areas for roosting. Very sensitive to disturbance of roosting sites.	**Low.** Suitable roosting sites not found in the study area.
Townsend's big-eared bat *Corynorhinus townsendii*	--/CC/ WBWG High	Inhabits caves and mines, but may also use bridges, buildings, rock crevices and tree hollows in coastal lowlands, cultivated valleys and nearby hills characterized by mixed vegetation throughout California below 3,300 meters.	**Low.** Suitable roosting sites not found in the study area.
Hoary bat *Lasiurus cinereus*	--/--/ WBWG Medium	Prefers open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for foraging. Roosts in dense foliage of medium to large trees. Feeds primarily on moths; requires water.	**Low.** Mature trees of the study area could provide roosting habitat.

TABLE 2-4 (Continued)
SPECIAL-STATUS SPECIES CONSIDERED IN EVALUATION OF THE SHOREWAY HOTEL PROJECT

[a] Potential to Occur Categories:
Low Potential = The project site and/or immediate vicinity only provide limited habitat. In addition, the species' known range may be outside of the project site.
Moderate Potential = The project site and/or immediate vicinity provide suitable habitat.
High Potential = The project site and/or immediate vicinity provide ideal habitat conditions.

STATUS CODES:

Federal: (U.S. Fish and Wildlife Service)

FT = Listed as Threatened (likely to become Endangered within the foreseeable future) by the Federal Government.
BCC = Bird of Conservation Concern
FSC = Federal Species of Concern
FC = Candidate for federal listing
FD= Delisted

State:

CT = Listed as Threatened by the State of California
CE= Listed as Endangered by the State of California
CC = California Candidate for Listing
CSC = California Species of Special Concern
CFP= California Department of Fish and Wildlife designated "fully protected"

WL = Watch list
§3503.5 = Protection for nesting species of Falconiformes (hawks) and Strigiformes (owls)
* Special animal-listed on CDFG's Special Animal List

Other:

California Native Plant Society (CNPS) California Rare Plant Ranks (CRPR):
1A = Presumed extirpated in California; Rare or extinct in other parts of its range.
1B = Rare, threatened, or endangered throughout range; Most species in this rank are endemic to California.
2A = Extirpated in California, but common in other parts of its range.
2B = Rare, threatened, or endangered in California but common in other parts of its range.
3 = Need more information about species to assign it a ranking.
4 = Limited distribution and therefore warrants monitoring of status.
.1 = Seriously endangered in California
.2 = Fairly endangered in California
LS= Locally Significant Species

WBWG = Western Bat Working Group:
Low = Stable population
Medium = Need more information about the species, possible threats, and protective actions to implement.
High= Imperiled or at high risk of imperilment.

Most of the species identified within these quadrangles are associated with habitat types that do not occur within the project site but are present in the regional project vicinity, such as tidal mudflat, coastal salt marsh, dunes, valley and foothill grasslands, coastal scrub, or oak woodlands; none of which are found on the proposed project site.

Special-Status Plants

Specialized vegetation communities which could support special-status plant species documented in the region are not found at the project site therefore none are expected to occur at the project site.

Special-Status Animals

The following special-status animals were determined to have a moderate potential to occur within or adjacent to the project site:

- Special-status and Migratory Birds

Peregrine falcon (*Falco peregrinus*). Listed as Fully Protected under the California Fish and Game Code, the peregrine falcon was removed from the federal list of threatened and endangered species in 1999 and the State list of threatened and endangered species in 2008 due to recovery. Peregrines are known throughout California and are a year-around resident along the Pacific coast. The peregrine is a specialist, preying primarily on mid-sized birds, such as pigeons and doves, in flight. Occasionally these birds will take insects and bats. Although typical nesting sites for the species are tall cliffs, preferably over or near water, peregrines are also known to use urban sites, including the Bay Bridge and tall buildings throughout the Bay Area. Peregrines have been documented nesting in a nest box located on one of the Oracle Campus buildings in 2007 that is located within one mile of the proposed project site (CNDDB, 2015).

Other Breeding and Migratory birds. Other special-status and migratory birds could nest within or next to the project site on mature trees, dense shrubs or foliage, PG&E transmission towers, or adjacent buildings. Raptor species that may nest in the project site include red-tailed hawk, red-shouldered hawk (*Buteo lineatus*), and American kestrel (*Falco sparverius*). Passerine species that could nest in the area include but are not limited to Anna's hummingbird (*Calypte anna*), Bewick's wren (*Thryomanes bewickii*), American robin (*Turdus migratorius*), and American crow (*Corvus brachyrhynchos*), as well as European starling, house sparrow, Brewer's blackbird (*Euphagus cyanocephalus*), California towhee (*Melozone crissalis*), northern mockingbird (*Mimus polyglottos*), and lesser goldfinch (*Spinus psaltria*). The Migratory Bird Treaty Act (MBTA) and California Fish and Game Code protect raptors, most native migratory birds, and breeding birds that would occur at the project site and/or nest in the surrounding vicinity.

a) **Less than Significant with Mitigation.** The proposed project would not have a substantial adverse effect either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status[2] species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife[3] (CDFW) or U.S. Fish and Wildlife Service (USFWS).

Nesting Birds

Trees and building within and surrounding the proposed project area provide suitable habitats for breeding birds, including the CDFW-fully protected Peregrine falcon. Most native, breeding birds are protected under Section 3503 of the CDFG Code (Code), and raptors are protected under Section 3503.5 of the Code. In addition, both Section 3513 of the Code and the Federal Migratory Bird Treaty Act (16 U.S. Code, Sec. 703 Supp. I, 1989) prohibit the killing, possession, or trading of migratory birds. Finally, Section 3800 of the Code prohibits the taking of non-game birds, which are defined as birds occurring

2 The term "special-status" species includes those species that are listed and receive specific protection defined in federal or state endangered species legislation, as well as species not formally listed as Threatened or Endangered, but designated as "Rare" or "Sensitive" on the basis of adopted policies and expertise of state resource agencies or organizations, or local agencies such as counties, cities, and special districts. A principle source for this designation is the California "Special Animals List" (CDFW, 2015a).

3 The California Department of Fish and Game (CDFG) changed its name on January 1, 2013, to The California Department of Fish and Wildlife (CDFW). In this document, references to literature published by CDFW prior to Jan. 1, 2013 are cited as 'CDFG, [year]'. The agency is otherwise referred to by its new name, CDFW. CDFG Code remains as such and is referred to as "Code".

naturally in California that are neither game birds nor fully protected species. To the degree feasible, construction activities would be scheduled to avoid the nesting season between February 1st and August 31st. In the event construction or vegetation removal must be performed during the nesting season, potential impacts to breeding or nesting special-status birds could be significant and would be minimized to ***less than significant*** levels with the implementation of **Mitigation Measure BIO-1**.

> **Mitigation Measure BIO-1:** To the extent practicable, construction activities including tree removal, utility relocation, and the start of new site construction shall be performed between September 1st and January 31st in order to avoid breeding and nesting season for birds. If these activities cannot be performed during this period, a preconstruction survey for nesting birds shall be conducted by a qualified biologist.
>
> Surveys shall be performed during breeding bird season (February 1st – August 31st) no more than 7 days prior to construction activities listed above in order to locate any active passerine nests within 250 feet of the project site and any active raptor nests within 500 feet of the project site. Surveys shall be performed in accessible areas within 500 feet of the project site and include suitable habitat within line of sight as access is available.
>
> If active nests are found on either the project site or within the 500-foot survey buffer surrounding the project site, no-work buffer zones shall be established around the nests. Buffer distances will consider physical and visual barriers between the active nest and project activities, existing noise sources and disturbance, as well as sensitivity of the bird species to disturbance. Modification of standard buffer distances, 250 feet for active passerine nests and 500 feet for active raptor nests, will be determined by a qualified biologist in coordination with CDFW. No construction shall occur within a buffer zone until young have fledged or the nest is otherwise abandoned as determined by the qualified biologist. If work during the nesting season stops for 7 days or more and then resumes, then nesting bird surveys shall be repeated, to ensure that no new birds have begun nesting in the area.

b) **No Impact.** The proposed project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS because no riparian habitat or other sensitive natural community is mapped or was identified on the proposed project site by the ESA biologist during the June 27, 2015, site visit. There would be no ***impact***.

> **Mitigation:** None required.

c) **No Impact.** The proposed project would not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means as there are no jurisdictional wetlands on the proposed project site. There would be no ***impact***.

> **Mitigation:** None required.

d) **No Impact.** The proposed project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites because the project is not located within a wildlife corridor or native wildlife nursery site. There would be no ***impact***.

Mitigation: None required.

e) **No Impact.** The proposed project would not conflict with any local policies or ordinances protecting biological resources identified by San Mateo County or the City of Belmont. There would be no ***impact***.

Mitigation: None required.

f) **No Impact.** The proposed project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. There would be no ***impact***.

Mitigation: None required.

References

California Department of Fish and Wildlife (CDFW), 2015a. Natural Diversity Database. March 2015. Special Animals List. Periodic publication. 51 pp.

CDFW, 2014b. Natural Diversity Database. April 2015. Special Vascular Plants, Bryophytes, and Lichens List. Quarterly publication. 125 pp.

California Native Plant Society (CNPS), 2015a. Inventory of Rare and Endangered Plants for the San Mateo, Woodside, Redwood Point, and Palo Alto U.S. Geographical Survey (USGS) 7.5-minute topographic quadrangles. [http://www.rareplants.cnps.org/] Accessed June 24, 2015.

California Natural Diversity Database (CNDDB), 2015. Rarefind version 5 query of the San Mateo, Woodside, Redwood Point, and Palo Alto USGS 7.5-minute topographic quadrangles, Commercial Version. Accessed June 24, 2015.

United States Fish and Wildlife Service (USFWS), 2015. My Project, IPaC Trust Resource Report of Federally Endangered and Threatened Species in the San Mateo, Woodside, Redwood Point, and Palo Alto USGS 7.5-minute topographic quadrangles, June 24, 2015.

2.2.5 Cultural Resources

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
5.	**CULTURAL RESOURCES — Would the project:**				
a)	Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☒
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒
d)	Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

Discussion

a) **No Impact.** A significant impact would occur if the project would cause a substantial adverse change to a historical resource, herein referring to historic-period architectural resources or the built environment, including buildings, structures, and objects. A substantial adverse change includes the physical demolition, destruction, relocation, or alteration of the resource.

ESA completed a records search at the Northwest Information Center (NWIC) of the California Historical Resources Information System on May 27, 2015 (File No. 14-1658). The review included the project area and a ½-mile radius. Previous surveys, studies, and site records were accessed. Records were also reviewed in the Historic Property Data File for San Mateo County, which contains information on places of recognized historical significance including those evaluated for listing in the *National Register of Historic Places*, the *California Register of Historical Resources*, the *California Inventory of Historical Resources*, *California Historical Landmarks*, and *California Points of Historical Interest*. The purpose of the records search was to (1) determine whether known cultural resources have been recorded within the project vicinity; (2) assess the likelihood for unrecorded cultural resources to be present based on historical references and the distribution of nearby sites; and (3) develop a context for the identification and preliminary evaluation of cultural resources.

The project site is undeveloped open space without any buildings or structures that could be considered historic resources as defined by CEQA Section 15064.5. The records search revealed no historic-period resources of the built environment on or adjacent to the project site. A review of historic aerial maps of the project vicinity reveal that the commercial office buildings surrounding the project site to the north, south, and east were developed within the last 25 to 30 years, and would not meet the minimum age threshold (45 years) for eligibility for listing in the federal, state, or local registers of historical resources. Shoreway Road and U.S. 101 are immediately west of the project site. As there are no historical resources on or adjacent to the project, site, the proposed project would have ***no impact*** on historical resources.

Mitigation: None required.

b) **Less than Significant with Mitigation.** This section discusses archaeological resources, both as historical resources according to Section 15064.5 as well as unique archaeological resources as defined in Section 21083.2(g). A significant impact would occur if the project would cause a substantial adverse change to an archaeological resource through physical demolition, destruction, relocation, or alteration of the resource.

The project site is within the traditional territory of the Costanoan or Ohlone people (Levy, 1978: 485–495). The people collectively referred to by ethnographers as Costanoan were actually distinct sociopolitical groups that spoke at least eight languages of the same Penutian language group. The Ohlone occupied a large territory from San Francisco Bay in the north to the Big Sur and Salinas Rivers in the south. The primary sociopolitical unit was the tribelet, or village community, which was overseen by one or more chiefs. The proposed project is in the greater *Ssalson* tribal area, who lived in at least three main villages along San Mateo Creek (Milliken et al., 2009). After European contact, Ohlone society was severely disrupted by missionization, disease, and displacement. Today, the Ohlone still have a strong presence in the San Francisco Bay Area, and are highly interested in their historic and prehistoric past.

Base maps at the NWIC indicate that two cultural resources studies have been completed adjacent to the project site (Pacific Legacy, 2000; LSA, 2009). The project site itself has not previously been the subject of a cultural resources study. No prehistoric archaeological resources have been identified within the project site or within a ½-mile radius. The nearest archaeological site is more than 1 mile to the west of the project site. An ESA archaeologist conducted a surface survey of the project site on June 4, 2015. Soils in the project site consist of light grayish brown fill with gravels. No prehistoric or historic-period archaeological resources were identified.

Historically, the project site would have been well within the perimeter marshland of the San Francisco Bay. Geologically, the project site is mapped as artificial fill over estuarine Bay Mud (Witter et al., 2006). As a recent deposit, artificial fill does not have the potential to contain prehistoric archaeological materials. In general, Bay Mud deposits are also not expected to contain buried archaeological deposits because they were formed in settings that were either submerged, or subject to regular tidal influence. As such, Bay Mud deposits are generally estimated to have a low to very low potential for having buried prehistoric sites (Meyer and Rosenthal in Byrd and Darcangelo, 2008).

Based on the results of the records and literature search, nearby site distribution, previous disturbance, and the geologic context in the project site it does not appear that the proposed project has the potential to impact archaeological resources. However, the discovery of archaeological materials during ground-disturbing activities cannot be entirely discounted, and would result in a potentially adverse impact. In the event of the discovery of archaeological resources during project construction activities,

implementation of the following mitigation measure would reduce potential impacts to a ***less-than-significant*** level.

> **Mitigation Measure CUL-1: Unanticipated Discovery of Archaeological Resources.** If prehistoric or historic-period archaeological resources are encountered, all construction activities within 100 feet would halt and the City of Belmont would be notified. Prehistoric archaeological materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil ("midden") containing heat-affected rocks, artifacts, or shellfish remains; and stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-period materials might include stone, concrete, or adobe footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse. A Secretary of the Interior-qualified archaeologist would inspect the findings within 24 hours of discovery. If it is determined that the project could damage a historical resource or a unique archaeological resource (as defined pursuant to the CEQA *Guidelines*), mitigation would be implemented in accordance with PRC Section 21083.2 and Section 15126.4 of the CEQA *Guidelines*, with a preference for preservation in place. Consistent with Section 15126.4(b)(3), this may be accomplished through planning construction to avoid the resource; incorporating the resource within open space; capping and covering the resource; or deeding the site into a permanent conservation easement. If avoidance is not feasible, a qualified archaeologist would prepare and implement a detailed treatment plan in consultation with the City of Belmont. Treatment of unique archaeological resources would follow the applicable requirements of PRC Section 21083.2. Treatment for most resources would consist of (but would not be not limited to) sample excavation, artifact collection, site documentation, and historical research, with the aim to target the recovery of important scientific data contained in the portion(s) of the significant resource to be impacted by the project. The treatment plan would include provisions for analysis of data in a regional context, reporting of results within a timely manner, curation of artifacts and data at an approved facility, and dissemination of reports to local and state repositories, libraries, and interested professionals.

c) **No Impact.** A significant impact would occur if the proposed project would destroy a unique paleontological resource or site, or a unique geologic feature. Paleontological resources are the fossilized evidence of past life found in the geologic record. Despite the tremendous volume of sedimentary rock deposits preserved worldwide, and the enormous number of organisms that have lived through time, preservation of plant or animal remains as fossils is an extremely rare occurrence. Because of the infrequency of fossil preservation, fossils—particularly vertebrate fossils—are considered to be nonrenewable resources. Because of their rarity, and the scientific information they can provide, fossils are highly significant records of ancient life.

The project site is underlain by artificial fill deposits over estuarine Bay Mud (Witter et al., 2006). This geologic deposit is not likely to yield significant paleontological remains, because it is a surface deposit, which is not considered to be a fossil-bearing rock unit. The proposed project would have ***no impact*** on paleontological resources.

Mitigation: None required.

d) **Less than Significant with Mitigation.** There is no indication from the archival research results that any part of the project site has been used for human burial purposes in the recent or distant past. It is unlikely that human remains would be encountered during construction of the proposed project. However, the possibility of inadvertent discovery cannot be entirely discounted, and would result in a potentially adverse impact. In the event of the discovery of human remains during project construction activities, implementation of the following mitigation measure would reduce potential impacts to a ***less-than-significant*** level.

> **Mitigation Measure CUL-2: Unanticipated Discovery of Human Remains.** In the event of discovery or recognition of any human remains during construction activities, such activities within 100 feet of the find would cease until the San Mateo County Coroner has been contacted to determine that no investigation of the cause of death is required. The Native American Heritage Commission (NAHC) would be contacted within 24 hours if it is determined that the remains are Native American. The NAHC would then identify the person or persons it believes to be the most likely descendant from the deceased Native American, who in turn would make recommendations to the City of Belmont for the appropriate means of treating the human remains and any grave goods.

Cumulative Impacts

Less than Significant with Mitigation. Construction of the proposed project, in combination with past, present, and reasonably foreseeable future projects in the vicinity, could result in a significant cumulative impact on cultural resources.

The geographic scope of potential cumulative impacts on historical resources, archeological resources, paleontological resources, and human remains encompasses the project site vicinity and nearby vicinities. All cumulative projects identified in the vicinity are assumed to cause some degree of ground disturbance during construction and thus contribute to a potential cumulative impact on cultural resources.

Background research suggests that there are no historical resources within the project site. Background research also suggests that the potential to encounter archeological resources, paleontological resources, or human remains would be low; however, as described above, the project would have the potential to affect unknown resources should they be present on the project site. These impacts, in combination with those of the other identified cumulative projects, create the potential for a cumulative impact that would be significant without mitigation. With implementation of Mitigation Measure CUL-1 (Unanticipated Discovery of Archaeological Resources) and Mitigation Measure CUL-2 (Unanticipated Discovery of Human Remains), however, the proposed project's contribution to the potential cumulative impact would be less than cumulatively considerable (i.e., less than significant with mitigation).

Mitigation: Mitigation Measures CUL-1 and CUL-2.

References

Byrd, Ph.D., Brian F. and Michael Darcangelo, *Archaeological Survey Report for the US 101 Auxiliary Lanes (Route 85 to Embarcadero Road) Project, Santa Clara County, California, 04-SCL-101 PM 48.97/52.17 EA 04-4A33002008.* Prepared for Caltrans District 4. On file (S-35123), NWIC, 2008.

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2.2.6 Geology, Soils, and Seismicity

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
6. GEOLOGY, SOILS, AND SEISMICITY — Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in the California Building Code, creating substantial risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

Discussion

a.i) **Less than Significant.** The project site is located in a seismically-active region of California that is part of the Coast Ranges geomorphic province. This region is characterized by northwest trending valleys and mountain ranges running subparallel to the San Andreas Fault Zone. The closest active fault to the project site is the San Andreas fault, which is located approximately 4 miles to the west (Jennings, 2010). The San Andreas fault and other regional active faults, including the Hayward and Calaveras faults, pose the greatest threat of significant damage in the Bay Area according to the USGS Working Group (USGS, 2003b). These three faults exhibit strike-slip orientation and have experienced movement within the last 150 years.[4]

[4] A strike-slip fault is a fault on which movement is parallel to the fault's strike or lateral expression at the surface.

However, the project site is located neither in an Alquist-Priolo Earthquake Fault Zone, nor on or immediately adjacent to an active fault.[5] The Alquist-Priolo Earthquake Fault Zoning Act requires the delineation of zones by the California Department of Conservation, Geological Survey (CGS, formerly known as the California Division of Mines and Geology [CDMG]) along sufficiently active and well-defined faults. The purpose of the Act is to restrict construction of structures intended for human occupancy along traces of known active faults. Alquist-Priolo Zones are designated areas most likely to experience surface fault rupture, although fault rupture is not necessarily restricted to those specifically zoned areas. Given the project site is not located in an Alquist-Priolo Earthquake Fault Zone and is not located on or immediately adjacent to an active fault, there would be a ***less-than-significant*** impact related to fault rupture hazards.

Mitigation: None required.

a.ii) **Less than Significant.** As noted above, the project site is located in a seismically-active region of California where there are numerous active faults capable of causing substantial groundshaking. A 2014 study by the United States Geological Survey (USGS) indicates that there is a 72 percent likelihood of a Richter magnitude 6.7 or higher earthquake occurring in the San Francisco Bay Area region in the 30-year period beginning in 2014 (USGS, 2015). The project site could experience a range of ground shaking effects during an earthquake on one of the aforementioned Bay Area faults.[6] Depending on a variety of factors—such as distance to the epicenter, magnitude of the event, and behavior of underlying materials—groundshaking could be significant. Seismic shaking of this intensity can also trigger ground failures caused by liquefaction, potentially resulting in foundation damage, disruption of utility service, and roadway damage.[7] The project site is generally underlain by materials that have been characterized as loose/soft up to dense/very stiff alluvial materials that likely include silty sand, sandy gravel, silty clay and sandy clay. The geotechnical investigation prepared for the project site concluded that there was a moderate potential for liquefaction at the project site. It recommended that the propose project be supported on deep foundations, such as drilled piles, extending at least 10 feet into the stiff soils or at least 50 feet below ground surface, which would secure the building below any remaining fill materials, the soft clayey soils, and moderately liquefiable soils (Krazan, 2014). The proposed project would be required to adhere to the seismic standards of the most recent version of the California Building Code, which includes measures to ensure that structures can withstand maximum

5 An active fault is defined by the State of California is a fault that has had surface displacement within Holocene time (approximately the last 11,000 years). A potentially active fault is defined as a fault that has shown evidence of surface displacement during the Quaternary (last 1.6 million years), unless direct geologic evidence demonstrates inactivity for all of the Holocene or longer. This definition does not, of course, mean that faults lacking evidence of surface displacement are necessarily inactive. Sufficiently active is also used to describe a fault if there is some evidence that Holocene displacement occurred on one or more of its segments or branches (Hart, 2007).

6 Shaking intensity is a measure of ground shaking effects at a particular location, and can vary depending on the overall magnitude of the earthquake, distance to the fault, focus of earthquake energy, and type of underlying geologic material. The Modified Mercalli (MM) intensity scale is commonly used to measure earthquake effects due to ground shaking. The MM values for intensity range from I (earthquake not felt) to XII (damage nearly total).

7 Liquefaction is the process by which saturated, loose, fine-grained, granular, soil, like sand, behaves like a dense fluid when subjected to prolonged shaking during an earthquake.

expected groundshaking without catastrophic failure. While complete avoidance of any damage may not be feasible, incorporation of industry standard seismic design measures in accordance with current building seismic requirements would reduce potential impacts related to ground shaking to ***less-than-significant*** levels.

Mitigation: None required.

a.iii) **Less than Significant.** In general, saturated soils with cohesion-less materials such as sand have the highest potential to liquefy. According to mapping compiled by the Association of Bay Area Governments (ABAG), the project site is located in an area that has a very high potential for liquefaction (ABAG, 2015). However, the presence of liquefiable soils can really only be determined from site-specific soils data. The geotechnical investigation prepared for the project site concluded that there was a moderate potential for liquefaction at the project site. It recommended that the propose project be supported on deep foundations, such as drilled piles, extending at least 10 feet into the stiff soils or at least 50 feet below ground surface, which would secure the building below any remaining fill materials, the soft clayey soils, and moderately liquefiable soils (Krazan, 2014). The proposed project would be required to adhere to the seismic standards of the most recent version of the California Building Code, which includes measures to ensure that potential settlement and resultant damage from liquefaction is minimized. While complete avoidance of any damage may not be feasible, incorporation of industry standard seismic design measures in accordance with current building requirements would reduce potential impacts related to liquefaction to ***less-than-significant*** levels.

Mitigation: None required.

a.iv) **Less than Significant.** The project site is located in a relatively flat area without any significant topographic relief. The project site is not located on or adjacent to any hillsides or other substantial slopes. Therefore, the proposed project would not be adversely affected by potential impacts associated with seismically induced landslides and the impact would be ***less-than-significant***.

Mitigation: None required.

b) **Less than Significant.** Construction would include earthwork activities, which could expose soils to the effects of erosion and loss of topsoil if not managed appropriately. Because the project site and proposed amount of disturbance is greater than 1 acre, the project would require coverage under the State Water Resources Control Board's (SWRCB's) statewide General Construction Activities National Pollution Discharge Elimination System (NPDES) Stormwater Permit (General Permit). The General Permit requires contractors to prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) that would include erosion-control best management practices that would protect exposed soils from potential erosional forces. Once constructed, surface soils at the site would be covered by the proposed structure, parking, driveways, and landscaping

that would prevent long term erosional effects from occurring. Therefore, with implementation of this regulatory requirement, the potential impact would be ***less than significant***.

Mitigation: None required.

c) **Less than Significant.** The project site is underlain by alluvial deposits that have been generally characterized as loose/soft materials (Krazan, 2014). Soft alluvial materials could have the potential for compression under new design loading. If not designed appropriately, construction on relatively loose materials could be subject to subsidence or differential settlement. However, the proposed project would be required to adhere to site preparation standards in accordance with building code requirements, which include preparation of a site-specific design-level evaluation of underlying materials and their engineering characteristics. The site would be raised 2 to 3 feet with 1,370 cubic yards of excavation, followed by 6,189 cubic yards of fill imported to the site. The geotechnical investigation prepared for the project site concluded that there was a moderate potential for liquefaction at the project site. It recommended that the propose project be supported on deep foundations, such as drilled piles, extending at least 10 feet into the stiff soils or at least 50 feet below ground surface, which would secure the building below any remaining fill materials, the soft clayey soils, and moderately liquefiable soils (Krazan, 2014). Pursuant to the City's building code requirements, a final design-level geotechnical investigation would be required of the project with site preparation recommendations that the site soils or fill would be sufficient to support the proposed foundation and improvements. Therefore, with implementation of industry-standard engineering design measures in accordance with building code standards, the potential impacts associated with unstable soils would be ***less than significant***. Potential impacts related to liquefaction are discussed under 6.a.ii, above.

Mitigation: None required.

d) **Less than Significant.** In general, silty clay materials located along the bay shoreline, as observed in the project site vicinity, are commonly associated with a moderate to high potential for expansion (Krazan, 2014). If not addressed during site preparation prior to construction, the proposed foundations could be subject to damage as a result of long-term exposure to expansive soils where the volumetric changes over time lead to foundation damage. Expansive soils can either be removed or replaced with engineered fill or treated onsite to remove the potential for expansion. Therefore, with implementation of industry-standard techniques in accordance with current building code requirements, the proposed project would have a ***less-than-significant*** impact related to expansive soils.

e) **No Impact.** The proposed project does not require the use of septic tanks or any other alternative wastewater disposal system. Therefore, the project would have ***no impact*** related to the support of septic systems.

Mitigation: None required.

Cumulative Impacts

The project site is located in a seismically active area, and the proposed project, along with past, present and reasonably foreseeable future projects, could expose people and structures to potentially adverse effects associated with earthquakes, including seismic groundshaking and seismic-related ground failure. The impact of the risks associated with exposure to potential seismic, geological, and soils hazards is generally localized because of the dependence on site-specific conditions and generally do not combine with other projects to become cumulatively considerable. Site-specific geotechnical studies required by the City determine how each project would be designed to minimize exposure of people to these impacts. All current and future projects would be constructed in accordance with the most recent version of the California Building Code seismic safety requirements, as well as in accordance with the recommendations contained in project-specific geotechnical reports that address site-specific hazards. Therefore, cumulative impacts related to geology and soils would be ***less than significant***.

Mitigation: None required.

References

Association of Bay Area Governments (ABAG), *Liquefaction Susceptibility*, http://gis.abag.ca.gov/arcgis/rest/directories/arcgisoutput/Utilities/PrintingTools_GPServer/_ags_dfe1c13bfdb44639aa84ca03a815e826.pdf, accessed May 29, 2015.

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Krazan & Associates, Incorporated, *Geotechnical Engineering Investigation, Proposed Springhill Suites Hotel, Shoreway and Cormorant Road, Belmont, California,* November 24, 2014.

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United States Geological Survey (USGS) Uniform California Earthquake Rupture Forecast (UCERF3), Fact Sheet 2015-3009, *UCERF3: A New Earthquake Forecast for California's Complex Fault System,* http://pubs.usgs.gov/fs/2015/3009/pdf/fs2015-3009.pdf, March 2015.

2.2.7 Greenhouse Gas Emissions

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
7. GREENHOUSE GAS EMISSIONS — Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Setting

"Global warming" and "global climate change" are the terms used to describe the increase in the average temperature of the earth's near-surface air and oceans since the mid-20th century and its projected continuation. Increases in greenhouse gas (GHG) concentrations in the earth's atmosphere are thought to be the main cause of human-induced climate change. GHGs naturally trap heat by impeding the exit of solar radiation that has hit the earth and is reflected back into space. Some GHGs occur naturally and are necessary for keeping the earth's surface inhabitable. However, increases in the concentrations of these gases in the atmosphere during the last 100 years have decreased the amount of solar radiation that is reflected back into space, intensifying the natural greenhouse effect and resulting in the increase of global average temperature. Carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6) are the principal GHGs. When concentrations of these gases exceed natural concentrations in the atmosphere, the greenhouse effect may be enhanced. CO_2, CH_4, and N_2O occur naturally, and are also generated through human activity. Emissions of CO_2 are largely by-products of fossil fuel combustion, whereas CH_4 results from off-gassing[8] associated with agricultural practices and landfills. Other human-generated GHGs include fluorinated gases--such as SFCs, PFCs, and SF_6--which have much higher heat-absorption potential than CO_2, and are byproducts of certain industrial processes.

CO_2 is the reference gas for climate change because it is the predominant GHG emitted. The effect that each of the aforementioned gases can have on global warming is a combination of the mass of their emissions and their global warming potential (GWP). GWP indicates, on a pound-for-pound basis, how much a gas is predicted to contribute to global warming relative to how much warming would be predicted to be caused by the same mass of CO_2. CH_4 and N_2O are substantially more potent GHGs than CO_2, with 100-year GWPs of 21 and 310 times that of CO_2, respectively. In emissions inventories, GHG emissions are typically reported in terms of pounds or metric tons of CO_2 equivalents (CO_2e). CO_2e are calculated as the product of the mass emitted of a given GHG and its specific GWP. While CH_4 and N_2O have much higher GWPs than CO_2, CO_2 is emitted in such vastly higher quantities that it accounts for the majority of GHG emissions in CO_2e.

8 Off-gassing is defined as the release of chemicals under normal conditions of temperature and pressure.

With regard to impacts from GHGs, both BAAQMD and the California Air Pollution Control Officers Association (CAPCOA) consider GHG impacts to be exclusively cumulative impacts (BAAQMD, 2012; CAPCOA, 2008); therefore, assessment of significance is based on a determination of whether the GHG emissions from a project represent a cumulatively considerable contribution to the global atmosphere. This analysis uses both a quantitative and a qualitative approach. The quantitative approach is used to address the first significance criterion: Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment? This analysis considers that, because the quantifiable thresholds developed by BAAQMD in its *Justification Report* (BAAQMD, 2009) were formulated based on AB 32 and California Climate Change Scoping Plan reduction targets for which its set of strategies were developed to reduce GHG emissions statewide, a project cannot exceed a numeric BAAQMD threshold without also conflicting with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs (the state Climate Change Scoping Plan). Therefore, if a project exceeds a numeric threshold and results in a significant cumulative impact, it would also result in a significant cumulative impact with respect to plan, policy, or regulation consistency, even though the project may incorporate measures and have features that would reduce its contribution to cumulative GHG emissions.

Separate thresholds of significance are established for operational emissions from stationary sources (such as generators, furnaces, and boilers) and non-stationary sources (such as on-road vehicles). The threshold for stationary sources is 10,000 metric tons of CO_2e per year (i.e., emissions above this level may be considered significant). For non-stationary sources, three separate thresholds have been established:

- Compliance with a Qualified Greenhouse Gas Reduction Strategy (i.e., if a project is found to be out of compliance with a Qualified Greenhouse Gas Reduction Strategy, its GHG emissions may be considered significant); or
- 1,100 metric tons of CO_2e per year (i.e., emissions above this level may be considered significant); or
- 4.6 metric tons of CO_2e per service population per year (i.e., emissions above this level may be considered significant). (Service population is the sum of residents plus employees expected for a development project.)

The quantitative threshold of 1,100 metric tons of CO_2e annually proposed by BAAQMD in its 2009 *Justification Report* is applied in this analysis. If the proposed project's operational GHG emissions would exceed this threshold then, consistent with BAAQMD Guidelines, it would be considered to have a cumulatively considerable contribution of GHG emissions and a significant cumulative impact on climate change.

Discussion

a, b) **Less than Significant.** GHG emissions resulting from the project were estimated using CalEEMod version 2013.2.2, with model data and assumptions included in Appendix AQ. Construction emissions were estimated for equipment and truck exhaust and construction worker vehicles. In regards to operations, vehicle trips assumed default

trip lengths for urban land uses, which are embedded in CalEEMod. Trip generation information was based on ITE data and the default fleet mix was adjusted to represent the automotive and delivery truck categories applicable to the executive hotel land use, based on professional experience. The model makes adjustments for implementation of Pavley vehicle standards and Low Carbon Fuel Standards. Area and indirect sources associated with project operations would primarily result from electrical usage, water and wastewater transport (the energy used to pump water and wastewater to and from the project) and solid waste generation. GHG emissions from electrical usage are generated when energy consumed on the site is generated by fuel combustion. GHG emissions from water and wastewater transport are also indirect emissions resulting from the energy required to transport water from its source, and the energy required to treat wastewater and transport it to its treated discharge point. Solid waste emissions are generated when the increased waste generated by the project is taken to a landfill to decompose.

Construction emissions over the full buildout duration were estimated using CalEEMod and would be approximately 1,142 metric tons CO_2e. Notably, the BAAQMD has not established a specific GHG significance threshold for construction. Since project construction would be temporary and would not exceed an applicable threshold, short-term GHG emissions associated with construction would be ***less than significant***.

In regards to operations, the CalEEMod model was used to estimate GHG emissions from motor vehicle trips, grid electricity usage, solid waste, and other sources (including area sources, natural gas combustion, and water/wastewater conveyance). **Table 2-5** presents an estimate of the proposed project's unmitigated operational CO_2e emissions.

TABLE 2-5
EMISSIONS OF GHGS FROM OPERATION OF THE PROJECT

Source[a]	Emissions (metric tons of CO_2e per year)
Area	0.0
Energy	281.3
Mobile	763.0
Waste	42.1
Water	9.3
Total	1,095.7
BAAQMD GHG Threshold	*1,100*
Significant (Yes or No)?	*No*

[a] GHG emissions were calculated using the CalEEMod model for project operations. Trip generation information was based on ITE data and the default fleet mix was adjusted to represent the automotive and delivery truck categories applicable to the executive hotel land use, based on professional experience. Updated Title 24 electricity and natural gas energy intensity to match 2013 Title 24 standards. Additional assumptions and data are included in Appendix AQ.

Table 2-5 indicates that unmitigated GHG emissions associated with the project would not exceed the BAAQMD's GHG threshold of 1,100 metric tons of CO_2e per year. The proposed project would not considerably contribute to cumulative effects on climate change.

The proposed project would be located in the City of Belmont, which has not adopted a qualified GHG emissions reduction strategy, so consistency with such a plan cannot be assessed. GHG emission impacts associated with the project were analyzed pursuant to the thresholds proposed by BAAQMD in its 2009 *Justification Report* that account for implementation of state-wide regulations and plans, such as the AB 32 Scoping Plan, as well as Pavley and the low carbon fuel standards. Since the proposed project would not exceed applicable GHG thresholds, the project would also be consistent with applicable local plans, policies, and regulations for GHGs. The proposed project would not conflict with the provisions of AB 32, the applicable air quality plan, or any other State or regional plan, policy or regulation of an agency adopted for the purpose of reducing GHG emissions. The cumulative GHG impact would be ***less than significant***.

Mitigation: None required.

Cumulative Impacts

As stated above, GHG impacts are considered to be exclusively cumulative impacts. The cumulative impact analysis is provided under the discussions for (a) and (b), above.

References

Bay Area Air Quality Management District (BAAQMD), 2009. *Revised Draft Options and Justification Report California Environmental Quality Act Thresholds of Significance*, October 2009.

Bay Area Air Quality Management District (BAAQMD), 2012. *BAAQMD CEQA Guidelines, California Environmental Quality Act Air Quality Guidelines,* May 2012, http://www.baaqmd.gov/pln/ceqa/ceqa_guide.pdf.

California Air Pollution Control Officers Association (CAPCOA), 2008. *CEQA & Climate Change, Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act*, January 2008.

2.2.8 Hazards and Hazardous Materials

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
8.	**HAZARDS AND HAZARDOUS MATERIALS — Would the project:**				
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☒	☐
f)	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
h)	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

Discussion

a, b) **Less than Significant.** The construction of the proposed project would require heavy equipment for earthwork activities as well as hazardous materials, including fuels, oils, solvents, glues and others. If not managed appropriately, construction activities could potentially expose construction workers or the environment to hazardous materials through inappropriate use, storage, handling, or disposal. Heavy equipment could require on-site refueling, which could also result in inadvertent releases either through poor management or upset and accidental conditions. However, project construction would require adherence to the NPDES General Permit, which would necessitate the preparation and implementation of a SWPPP. The SWPPP would include best management practices that cover the transport, use, and disposal of any hazardous materials used during construction that minimize the potential exposure to workers, the public, and the environment, as well as the potential for upset and accidental release conditions.

Construction activities would also include ground disturbing activities, which could expose workers and/or the public to contaminated soil and/or groundwater, if present. However, according to the Phase I Environmental Site Assessment conducted for the project site, there were no recognized environmental conditions present, which indicates that there is a low probability for encountering any contamination (Krazan, 2014). In addition, the California Department of Toxic Substances Control (DSTC) EnviroStor database and the SWRCB's Geotracker database both do not list the project site nor any sites in the immediate vicinity on their lists of sites with known releases (DTSC, 2015; SWRCB, 2015).

Once developed, the site would involve storage and use of relatively limited quantities of hazardous materials—such as cleaners, toners, correction fluid, paints, lubricants, kitchen and restroom cleaners, pesticides and other maintenance materials--contained within manufacturers' containers managed through a Hazardous Materials Business Plan as required by local, state, and federal regulations. With adherence to existing regulatory requirements, the potential impact from the routine transport, use, and disposal of hazardous materials would be ***less-than-significant***.

Mitigation: None required.

c) **Less than Significant.** The closest school to the project site, Nesbit Elementary School, is located more than half a mile to the northwest. Due to the limited use of hazardous materials and associated emissions, as well as the implementation of current regulatory practices including standard protection measures around any hazardous materials, the associated risk to nearby schools would be ***less than significant***.

Mitigation: None required.

d) **Less than Significant.** As noted above, the project site is not included on the EnviroStor or Geotracker databases of hazardous materials sites and was not determined to have any record of prior releases according the Phase I Environmental Site Assessment (DTSC, 2015; SWRCB, 2015; Krazan, 2014). In addition, there were no sites identified in the immediate vicinity of the project site that could have potentially migrated on to the site. A 1991 Phase I investigation did discover a relatively small area of stained surface soils. However, the soils were excavated and set aside for offsite disposal (Krazan, 2014). Therefore, the potential impact would be ***less than significant***, and no mitigation is necessary.

Mitigation: None required.

e) **Less than Significant.** The proposed project site is located approximately half a mile north of the San Carlos Airport and is within the boundaries of the airport influence area (AIA) for San Carlos Airport as defined in the San Mateo County Comprehensive Land Use Plan (1996 ALUCP). The 1996 ALUCP encourages compatibility of land uses with existing airports in the region. The project site is located within the sphere of influence

for the airport and is subject to the building height restrictions as defined in the 1996 ALUCP. The building height policies in the 1996 ALUCP are based on information contained in Federal Aviation Regulations (FAR) Part 77, *Safe, Efficient Use and Preservation of the Navigable Airspace*. The FAA has already reviewed the proposed project plans and determined that the project as proposed is consistent with the airspace obstruction standards and would not be a hazard to air navigation (FAA, 2015). Therefore, the potential safety impacts related to new construction in the environs of San Carlos Airport is ***less than significant***.

Mitigation: None required.

Please see Section 2.2-10, Land Use and Land Use Planning, for a discussion of the proposed project's consistency with 1996 ALUCP.

f) **No Impact.** The project site is not located within 2 miles of any private airstrip, and therefore it would have ***no impact*** related to this criterion.

Mitigation: None required.

g) **Less than Significant.** The proposed project would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. As stated in Section 2.2.16, Transportation and Circulation, the proposed project would not result in significant impacts to the existing road networks surrounding the project site and would meet all requirements for access and egress of emergency vehicles in accordance with building code requirements. Please see Section 2.2.16, for additional discussion of emergency access. Therefore, the potential impact related to emergency and evacuation plans would be ***less than significant***.

Mitigation: None required.

h) **No Impact.** The project site is located in an urban area that is serviced by the Belmont Fire Protection District. New construction would be required to comply with all applicable fire code and fire suppression requirements. Therefore, the proposed project would not expose people or structures to significant risks associated with wildland fires. There would be ***no impact***.

Mitigation: None required.

Cumulative Impacts

As discussed above, the project would have a less-than-significant potential to release hazardous substances and materials that would adversely affect the environment or public. With implementation of existing regulatory requirements, both the construction and operation of the project would minimize the potential for any unauthorized releases. Hazards and hazardous material impacts typically occur in a local or site-specific context (versus a cumulative context) because of variances with site-specific use and for localized

effects associated with most land uses. Implementation of regulatory requirements of DTSC, the Regional Water Quality Control Board (RWQCB), Caltrans, and San Mateo County Environmental Health Division would similarly address site-specific hazards and emergency access and operation for present and reasonably foreseeable future projects. Anticipated development projects that would occur in the surrounding region would not significantly increase human health or safety risks with adherence to these existing regulatory requirements.

The cumulative impacts related to hazards and hazardous materials would be ***less than significant***.

References

California Department of Toxic Substances Control (DTSC), *EnviroStor Database*, http://www.envirostor.dtsc.ca.gov/public/mapfull.asp?global_id=&x=-119&y=37&zl=18&ms=640,480&mt=m&findaddress=True&city=Cormorant%20Drive,%20Belmont%20CA&zip=&county=&federal_superfund=true&state_response=true&voluntary_cleanup=true&school_cleanup=true&ca_site=true&tiered_permit=true&evaluation=true&military_evaluation=true&school_investigation=true&operating=true&post_closure=true&non_operating=true, accessed June 2, 2015.

City/County Association of Governments of San Mateo County (C/CAG), *San Mateo County Comprehensive Airport Land Use Plan,* December 1996.

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2.2.9 Hydrology and Water Quality

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
9. HYDROLOGY AND WATER QUALITY — Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of a site or area through the alteration of the course of a stream or river, or by other means, in a manner that would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
d) Substantially alter the existing drainage pattern of a site or area through the alteration of the course of a stream or river, or by other means, substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	☐	☐	☒	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☐	☒	☐
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	☐	☐	☒	☐
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j) Expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

Discussion

a, f) **Less than Significant.** Currently, stormwater runoff generated from the project site and surrounding vicinity is directed into the City of Belmont storm drain system and eventually released into the San Francisco Bay. The RWQCB's Water Quality Control Plan (Basin Plan) identifies various beneficial uses of San Francisco Bay in accordance with federal Clean Water Act requirements, which would ultimately receive runoff from the project site (RWQCB, 2010). Development projects in the City of Belmont must comply with the NPDES Permit No. CAS612008, which is the regional municipal permit issued to various Bay Area jurisdictions by the RWQCB (NPDES Order No. R2-2009-

0074) and covered through the San Mateo Countywide Water Pollution Prevention Program (SMCWPPP). The Municipal Regional Stormwater Permit (MRP) was issued on October 14, 2009, and revised November 28, 2011, replacing the previous permit originally issued February 2003 with additional requirements for development and redevelopment projects. The NPDES Municipal Stormwater Permitting (MS4) Program regulates stormwater discharges from separate storm sewer systems and is intended to reduce common pollutants that are discharged from urban watersheds (e.g. sediment, trash, oil/grease, etc.) through implementation of stormwater quality best management practices (BMPs) for both construction sites and the design of new developments and redevelopments.

In particular, Provision C.3 in the NPDES Permit governs storm drain systems and regulates post-construction stormwater runoff. The provision requires new development projects to incorporate treatment measures and other appropriate source control and site design features to reduce the pollutant load in stormwater discharges and to manage runoff flows. A project that adds at least 10,000 square feet of impervious surface is required to adhere to the C.3 provisions by including low-impact development (LID) measures. The proposed project would meet this threshold; therefore, it would be required to incorporate treatment measures and appropriate source control and site design measures under the NPDES permit.

The construction phase of the proposed project has the greatest potential to release sediment or hazardous materials in stormwater such that site runoff would be in non-compliance with water quality objectives found in the Basin Plan. The actual rate of stormwater runoff and amount of pollutants that might be generated from the construction site depends on the timing of rainfall relative to construction phases. Because the project site is greater than 1 acre, construction of the project would require coverage under SWRCB's General Permit under the NPDES program as enforced by the San Francisco RWQCB. Construction activity includes, but is not limited to, clearing, grading, excavation, temporary dewatering, and construction of new structures. As part of the General Permit, the contractor would be required to prepare and implement a SWPPP that contains BMPs to minimize the discharge of pollutants from the site throughout the construction period, and are responsible for the maintenance of all protective devices in good and effective condition. BMPs could include the following:

- A construction schedule that restricts excavation and grading activities to the dry season (generally April 15th to October 15th) to reduce erosion associated intense rainfall and surface runoff.
- A defined construction schedule that indicates a timeline for earthmoving activities, hydroseeding, and stabilization of soils;
- Soil stabilization techniques, such as hydroseeding and short-term biodegradable erosion control blankets;
- Silt fences, hay bales, or some alternative inlet protection at downstream storm drain inlets; and

- Post-construction inspection of all drainage facilities and clearing of drainage structures of debris and sediment.

With adherence to the aforementioned regulations, the potential impacts to water quality would be ***less than significant***.

Mitigation: None required.

b) **Less than Significant.** The proposed project would not include the extraction of any local groundwater supplies. Domestic water supply for the project site is provided by the Mid-Peninsula Water District, formerly the Belmont County Water District, originally formed in 1929. Since initiating operations, the District has purchased its entire water supply from the City of San Francisco Water Department, which does not access local groundwater supplies.

While the project will include landscaping, the net result of the project would increase the amount of impervious surfaces on the currently vacant lot. However, as stated above, the proposed project would be required to include design features that retain runoff from impervious areas on the project site in accordance with NPDES MS4 requirements. These requirements include incorporation of drainage features that are intended to maximize the amount of infiltration onsite.

In addition, the project site is located relatively close to the San Francisco Bay, and the underlying groundwater table is likely heavily influenced by the Bay. Therefore, as a result of the absence of any groundwater pumping needed for the proposed project, the incorporation of LID drainage features that encourage onsite infiltration, and the site location, development of the proposed project would not substantively lower the groundwater table as a result of increasing the amount of impervious surfaces, and the potential impact would be ***less than significant***.

Mitigation: None required.

c, d) **Less than Significant.** The proposed project is located in an urban watershed served by municipal storm drains, and there are no natural water features within or immediately adjacent to the project site. The proposed project would therefore not alter or otherwise affect the course of a stream or a river.

The project site is currently vacant and unpaved, and rainwater infiltrates the ground. The proposed development of the site would alter the existing drainage patterns by introducing new impervious surfaces. The proposed improvements would be required to include drainage control features in accordance with NPDES MS4 and SMCWPPP requirements. With adherence to these requirements, stormwater runoff would be managed through the incorporation of permanent stormwater control features, such as biofiltration located at the corners of the hotel building, pervious pavers, and flow-through planters. Stormwater would flow through these filtration systems before it is channeled to the site drainage system. These design requirements would minimize the rate and amount of stormwater

runoff generated from the project site, as well as control water quality of stormwater that is discharged offsite. While changes in the drainage patterns of stormwater runoff would occur due to the proposed improvements, with implementation of drainage control requirements the proposed project would not substantially alter drainage patterns such that it would result in erosion, siltation, or flooding on- or off-site. The impact would be ***less than significant***.

Mitigation: None required.

e) **Less than Significant.** As discussed above, potential project impacts associated with the capacity of drainage infrastructure would be addressed largely through adherence to drainage control requirements, which include measures to minimize the volume of runoff discharged offsite. The applicant would be responsible to ensure that peak runoff from the design storm event would adequately conveyed through downstream drainage conveyances. As such, stormwater runoff would be managed through the incorporation of these permanent stormwater controls into project designs. Therefore, the potential impact on drainage capacity would be ***less than significant***.

Mitigation: None required.

g) **No Impact.** The proposed project does not include any residential housing element. In addition, the project site is located outside of the 100-year flood zone according to maps prepared by the Federal Emergency Management Agency (FEMA) (FEMA, 2012). Therefore, there would be ***no impact*** related to this criterion.

Mitigation: None required.

h) **Less than Significant.** As noted above, the project site is located outside of the 100-year flood zone, and therefore the project would not impede or redirect flood flows. In addition, the proposed project would include drainage control features in accordance with local and state requirements to ensure that high storm events are adequately captured and either retained onsite or directed offsite.

However, due to its proximity to the Bay, the project site could be vulnerable to flooding as a result of sea level rise. According to projections from the California Climate Action, estimates for sea level rise ranging from 10 to 17 inches at mid-century (2050) and 31 to 69 inches at the end of the century (2100), currently provide the best available sea-level-rise projections for the West Coast (BCDC, 2015). Using a mapping tool provided by the National Oceanic and Atmospheric Administration, the project site would begin to be encroached by sea level rise at 36 inches, affecting just the edges of the site (NOAA, 2015). At 48 inches of sea level rise, the site would become partially inundated, and then it would become fully inundated at 60 inches (NOAA, 2015).

The proposed project would entail raising the existing grade 2 to 3 feet (24 to 36 inches), with importation of approximately 4,800 net cubic yards of engineered fill. Therefore,

despite the anticipated sea level rise predicted for the area, the raising of the existing grade would likely delay when sea level rise would adversely affect the proposed structure to beyond the design-life of the improvement. It should also be noted that sea level rise would be a gradual phenomenon, and not a sudden occurrence. Thus, while sea level rise could ultimately result in property damage or loss at the site, it would be far less likely to expose people to flood risk. As a result, there would be a ***less-than-significant*** impact related to impeding or redirecting flood flows.

Mitigation: None required.

i) **No Impact.** The project site is not located within a dam inundation area and therefore would have ***no impact*** related to the unlikely event of a catastrophic dam failure (SMCP, 2015). The project site is relatively close to the Redwood Shores Federal Emergency Management Agency (FEMA)-certified levee system protecting that development area, but the project site is outside of that area and not protected from inundation by any levee.

Mitigation: None required.

j) **No Impact.** The project site is not in a tsunami inundation zone and is distant from any slopes that could experience a mud flow (CGS, 2009). Seiche waves are not considered a hazard to the project site because it is not located immediately adjacent to large enclosed bodies of water. Thus, there would be ***no impact*** with respect to these issues.

Mitigation: None required.

Cumulative Impacts

As discussed above, the construction of the project would disturb surface soils and result in an increase in impervious surfaces and stormwater runoff. Compliance with existing regulations, as outlined above, would ensure that the project's impact on the local drainage system would be less than significant. Cumulative projects could also contribute to increased runoff due to increases in impervious surfaces. However, any proposed development in the Belmont Creek watershed, the geographical context for this cumulative analysis, that are larger than 1 acre would similarly have to satisfy all applicable requirements of the NPDES General Permit and operation (MS4 Regional Permit).

Cumulative projects could have general construction-related impacts on water quality in the Project area if not managed appropriately. Construction activities at other project sites could also increase erosion and subsequent sedimentation. As with the proposed project, all related projects are subject to the same federal regulations (Clean Water Act), state regulations (Water Quality Control Plan (Basin Plan)), and local regulations (San Mateo Countywide Water Pollution Prevention Program) that protect water quality and water resources. These regulations include NPDES permit requirements, stormwater pollution prevention plans, and post-development stormwater quality and quantity requirements that include LID features. All of these regulations are designed to ensure that the

incremental effects of individual projects do not cause a considerable contribution to cumulative impacts.

Therefore, despite the potential for the related projects to alter drainage patterns and runoff conditions, the adherence to the aforementioned requirements and implementation of LID drainage improvements would ensure that they do not result in cumulatively considerable contribution to cumulative impacts related to sedimentation, flooding, water quality, drainage system capacity, flood hazard areas, failure of a levee or dam, seiche, tsunami, or mudflows. The proposed project's cumulative impact would be less than significant.

References

Bay Conservation and Development Commission, *New Sea Level Rise Policies Fact Sheet,* available at http://www.bcdc.ca.gov/planning/climate_change/SLRfactSheet.shtml, June 8, 2015.

California Geological Survey (CGS), *Tsunami Inundation Map for Emergency Planning, Redwood Point Quadrangle (San Francisco Bay)*, also available at http://www.consrv.ca.gov/cgs/geologic_hazards/Tsunami/Inundation_Maps/SanMateo/Documents/Tsunami_Inundation_RedwoodPointPaloAlto_Quads_SanMateo.pdf, June 2009.

Federal Emergency Management Agency (FEMA), *Flood Insurance Rate Map No. 06081C0169E, San Mateo County*, October 16, 2012.

National Oceanic and Atmospheric Administration (NOAA), *Sea Level Rise Vulnerability,* available at http://coast.noaa.gov/slr/, accessed June 8, 2015.

San Mateo County Planning (SMCP), Dam Failure Inundation Areas, available at http://planning.smcgov.org/sites/planning.smcgov.org/files/documents/files/Dam_Failure_Inundation.pdf, accessed June 9, 2015.

2.2.10 Land Use and Land Use Planning

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
10.	**LAND USE AND LAND USE PLANNING — Would the project:**				
a)	Physically divide an established community?	☐	☐	☒	☐
b)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐
c)	Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

Discussion

a) **Less than Significant.** The project site is within an urban area in the City of Belmont, on the border of the Cities of San Carlos and Redwood City. Land uses in the project vicinity consist of commercial, institutional, and light industrial land uses (Alvine Pharmaceuticals, BioCardia, Nikon Precision, Inc., ABS-CBN International, UC Berkeley Extension, Merrimak Capital Corporation). Uses immediately adjacent to the project site include offices and parking for the Nikon Precision, Inc. facility to the north, and ABS-CBN International (a non-profit non-governmental organization) to the east. Nearby hotels include Sofitel San Francisco Bay to the east, and the Extended Stay America and Motel 6 to the north. The project site is currently an unpaved vacant lot.

The proposed project would result in an increase in land use intensity at the site, and would change the surrounding urban environment by establishing a visitor-serving use on underutilized land. The proposed project would be consistent with the commercial, light-industrial, and visitor-serving character of the area. Moreover, the proposed project would be developed within the existing lot lines of the project site, and it would not result in the construction of barriers to access across existing rights-of-way. Based on the foregoing, the proposed project would not physically divide an established community, and would result in a ***less-than-significant*** impact.

Mitigation: None required.

b) **Less than Significant.** The project site is located in the City of Belmont, and the proposed project would be required to comply with the City's General Plan. The Land Use Element of Belmont's *General Plan* designates the project site as Light Industrial (IL) and within the Airport Influence Area (AIA) for San Carlos Airport. The Belmont Zoning Ordinance implements the land use designations of the General Plan. The project site is within a Limited Manufacturing (M1) zoning district.

City of Belmont

As part of the proposed project, the General Plan land use designation would be changed to Highway Commercial (CH), and the site would be rezoned as Highway Commercial (C-3). Highway Commercial uses are defined as businesses dependent on automobile traffic for customers such as service stations, motels, restaurants, auto parts and supply establishments, offices with drop-in clientele, and a variety of retail businesses. The general plan allows for the addition of a Mixed Use area near the Ralston/U.S. 101 interchange; the project site is located within its vicinity. The proposed hotel project is consistent with the Highway Commercial land use designation.

The Zoning Ordinance describes the permitted uses for C-3 districts, which includes service establishments that supply commodities or provide services primarily to meet the needs of the community and the region. Given the proximity of San Carlos Airport, a hotel would be consistent with the service needs of this area. The Zoning Ordinance also establishes a maximum floor-area-ratio (FAR) of 1.5 within the C-3 District. The proposed project's FAR would be approximately 0.62, which would be within the allowable FAR permitted by the City's Zoning Ordinance. The maximum height within this district cannot exceed 40 feet. As stated in the Project Description, the project applicant would seek a height variance to allow for construction of the hotel up to 57 feet tall.

San Carlos Airport Land Use Compatibility

San Carlos Airport, a general aviation airport occupying 160 acres within the City of San Carlos, is located approximately half a mile southeast of the project site. The San Mateo County Airport Land Use Commission has adopted compatibility standards for land use developments proposed in proximity to San Carlos Airport. These standards comprise compatibility maps and policies related to noise, safety, and airspace protection contained in the 1996 *San Mateo County Airport Land Use Compatibility Plan*. The proposed project's consistency with these policies is analyzed below. The 1996 ALUCP is currently being updated. Therefore, each discussion also includes an analysis of the proposed project's consistency with the *Draft Final Airport Land Use Compatibility Plan* (2015 ALUCP) for San Carlos Airport, dated April 2015, which is anticipated to be adopted in October 2015.

Noise

The 1996 ALUCP establishes aircraft noise contours, which are continuous lines of equal nose level that define an airport's impact boundary and noise impact area. The contours are drawn in 5-decibel increments to resemble contours shown on a topographic map. These contours are the principle tool for analyzing airport/land use compatibility in the vicinity of airports. Based on the ALUCP, the proposed hotel site lies between the 55 CNEL and 60 CNEL contour under "existing" (1994) conditions. Hotel uses are compatible with noise levels less than 70 CNEL.

Based on the 2015 ALUCP, the project site lies between the 60 and 65 dBA CNEL contour under both existing and future (2035) conditions. The ALUCP indicates that lodging uses are compatible within this contour (C/CAG, 2015). The proposed project is therefore consistent with the noise contours in both the 1996 ALUCP and the 2015 ALUCP.

Safety

The 1996 ALUCP contains Safety Guidelines that recognize that certain types of land uses can be hazardous to safe air navigation. These include uses that would direct a steady flashing light toward aircraft on approach/takeoff, reflect sunlight toward an aircraft on approach/takeoff, attract large concentrations of birds within approach/climbout areas, or generate electrical interference with aircraft communications or instrumentation. The proposed hotel use would not contribute to these hazards, and the project would be compatible with the Safety Guidelines in the 1996 ALUCP.

The 2015 ALUCP defines six safety zones in the vicinity of the San Carlos Airport. The geometric patterns of the zones were designed to capture areas in the vicinity of the airport where the risk of an aircraft accident are greatest. Where an aircraft accident may occur is driven by aeronautical considerations; that is, the geography of risk is determined by the runway configuration, approach and departure procedures, and other factors that determine where aircraft fly and where accidents occur. Most of the project site would be located in Safety Zone 6 – Traffic Pattern Zone. Lodging uses are considered compatible with safety criteria for Safety Zone 6. A sliver of the project site at its southeastern corner, which would comprise surface parking under the proposed project, would be located in Safety Zone 4 – Outer Approach / Departure Zone. Short- and long-term lodging uses are considered conditionally compatible in Zone 4. Therefore, the proposed project would be compatible with the Safety Zones defined in the 2015 Draft Final ALUCP.

Airspace Protection

The 1996 ALUCP and the 2015 ALUCP adopt the provisions contained in Federal Aviation Regulations (FAR) Part 77, *Safe, Efficient Use and Preservation of the Navigable Airspace* to establish height restrictions and federal notification requirements related to proposed development within the FAR Part 77 boundaries. These height restrictions are established as "imaginary surfaces" above land in proximity to the airfield. The project site lies under the following to imaginary surface:

- Most of the project site lies beneath the Horizontal Surface, which limits the height of buildings and structures to 155 feet above mean sea level.
- A sliver of the project site's eastern edge lies beneath the Part 77 Approach Surface. At the project site, the height of the Part 77 approach surface is approximately 155 feet above mean sea level.

The proposed project would entail construction and operation of a 57-foot-tall building. The building would not penetrate the Horizontal Surface. Based on a review of the project plans, it appears that only the proposed project's parking lot would be located beneath the Approach Surface. Regardless, none of the proposed project features would penetrate the Approach Surface. Therefore, the proposed project would be compatible with the airspace protection policies contained in the 1996 ALUCP and the 2015 ALUCP.

Redwood Shores Owners Association

Due to the project site's proximity to the community of Redwood Shores, the City of Redwood City's Redwood Shores Owners Association (RSOA) requires a five-stage approval process for nearby projects that include approval of site use, general massing and building location, and design detail. The proposed project has obtained approval from the RCRA through stages 1, 2, and 3 (site selection; use bulk and mass; and design, respectively). Stages 4 and 5 are undertaken during construction and at project buildout.

Conclusion

The proposed project would not result in a fundamental conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect. Thus, the proposed project would result in a ***less-than-significant*** impact.

Mitigation: None required.

c) **No Impact.** There is no established habitat plan or natural community conservation plan established for the project site. Therefore, the proposed project would have ***no impact*** related to this criterion. For more information regarding onsite biological resources, see Section 4, Biological Resources.

Mitigation: None required.

References

City/County Association of Governments of San Mateo County (C/CAG), *Draft Final Airport Land Use Compatibility Plan for the Environs of San Carlos Airport,* April 2015.

City/County Association of Governments of San Mateo County (C/CAG), *San Mateo County Comprehensive Airport Land Use Plan,* December 1996.

City of Belmont, *Belmont General Plan Land Use and Open Space Element,* August 24, 1982.

U.S. Government, Code of Federal Regulations – Title 14, Aeronautics and Space, Part 77, Safe, Efficient Use, and Preservation of the Navigable Airspace, November15, 2013. Available online at: http://www.ecfr.gov/cgi-bin/text-idx?rgn=div5&node=14:2.0.1.2.9; accessed June 23, 2015.

2.2.11 Mineral Resources

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
11. MINERAL RESOURCES — Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

Discussion

a, b) **No Impact.** The project site is mapped by the California Geologic Survey as MRZ-1, indicating "no significant mineral deposits are present or where it is judged that little likelihood exists for their presence" (California Department of Conservation, Division of Mines and Geology, 2). Sites within the MRZ-1 contain Quaternary alluvial material, which contains too much clay and silt for use as an aggregate. Therefore, construction and operation of the proposed project would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. There would be ***no impact***.

Mitigation: None required.

Cumulative Impacts

Land use surrounding the project site also falls within the MRZ-1 classification. Therefore, the project site would not combine with past, present or reasonably foreseeable future projects to result in significant impacts to agricultural and forest resources. The cumulative impact would be ***less than significant***.

Mitigation: None required.

References

California Department of Conservation, Division of Mines and Geology (CDMG), 1987. *Mineral Land Classification: Aggregate Materials in the San Francisco-Monterey Bay Area, Special Report 146, Part II*. Available online at: https://archive.org/stream/minerallandclass00stin#page/n5/mode/2up, accessed June 15, 2015

2.2.12 Noise

Issues (and Supporting Information Sources):		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
12.	**NOISE — Would the project:**				
a)	Result in exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b)	Result in exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c)	Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
d)	Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
e)	For a project located within an airport land use plan area, or, where such a plan has not been adopted, in an area within two miles of a public airport or public use airport, would the project expose people residing or working in the area to excessive noise levels?	☐	☐	☒	☐
f)	For a project located in the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐

Setting

Sound is mechanical energy transmitted by pressure waves through a medium such as air. Noise is defined as unwanted sound. Sound is characterized by various parameters that include the rate of oscillation of sound waves (frequency), the speed of propagation, and the pressure level or energy content (amplitude). Sound pressure level is measured in decibels (dB), with zero dB corresponding roughly to the threshold of human hearing, and 120 to 140 dB corresponding to the threshold of pain. Typically, sound does not consist of a single frequency, but rather a broad band of frequencies varying in levels of magnitude. Given that the typical human ear is not equally sensitive to all frequencies of the audible sound spectrum, when assessing potential noise impacts, sound is measured using an electronic filter that de-emphasizes low and extremely high frequencies, referred to as A-weighting, and is expressed in units of A-weighted decibels (dBA).

Noise Exposure and Community Noise

Noise levels rarely persist consistently over a long period of time. Rather, noise levels at any one location vary with time. Specifically, community noise is the result of many distinct noise sources that constitute a relatively stable background noise exposure where the individual contributors are unidentifiable. Throughout the day, short duration single-event noise sources (e.g., aircraft flyovers, motor vehicles, sirens) that are readily identifiable to the individual add to the existing background noise level. The combination of the slowly changing background noise and the single-event noise events give rise to a constantly changing community noise environment.

To characterize a community noise environment and evaluate cumulative noise impacts, community noise levels must be measured over an extended period of time. This time-varying characteristic of environmental noise is described using statistical noise descriptors, including the ones described below:

L_{eq}: The equivalent sound level is used to describe noise over a specified period of time, typically one hour, in terms of a single numerical value. The L_{eq} is the constant sound level that would contain the same acoustic energy as the varying sound level, during the same time period (i.e., the average noise exposure level for the given time period).

L_{max}: The instantaneous maximum noise level measured during the measurement period of interest.

DNL: The day-night average sound level (DNL) is the energy average of the A-weighted sound levels occurring during a 24-hour period, accounting for the greater sensitivity of most people to nighttime noise by weighting ("penalizing") nighttime noise levels by adding 10 dBA to noise between 10:00 p.m. and 7:00 a.m.

CNEL: Similar to the DNL, the Community Noise Equivalent Level (CNEL) adds a 5-dBA "penalty" for the evening hours between 7:00 p.m. and 10:00 p.m. in addition to the 10-dBA penalty between the hours of 10:00 p.m. and 7:00 a.m.

In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise would be judged by those hearing it. With regard to increases in A-weighted noise level, the following relationships occur:

- except in carefully controlled laboratory experiments, a change of 1 dBA cannot be perceived;
- outside of the laboratory, a 3-dBA change is considered a just-perceivable difference;
- a change in level of at least 5 dBA is required before any noticeable change in human response would be expected; and
- a 10 dBA change is subjectively heard as approximately a doubling in loudness, and can cause adverse response.

These relationships occur in part because of the logarithmic nature of the decibel system. Because the decibel scale is based on logarithms, two noise sources do not combine in a simple additive fashion, but rather logarithmically. For example, if two identical noise sources produce noise levels of 50 dBA, the combined sound level would be 53 dBA, not 100 dBA.

Fundamentals of Vibration

As described in the Federal Transit Administration's (FTA's) *Transit Noise and Vibration Impact Assessment*, ground-borne vibration can be a serious concern for nearby neighbors, causing buildings to shake and rumbling sounds to be heard (FTA, 2006). In contrast to airborne noise, ground-borne vibration is not a common environmental problem. It is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. Some

common sources of ground-borne vibration are trains, buses and heavy trucks on rough roads, and construction activities, such as blasting, pile-driving, and operating heavy earth-moving equipment.

There are several different methods that are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. The PPV is most frequently used to describe vibration impacts to buildings. The root mean square (RMS) amplitude is most frequently used to describe the effect of vibration on the human body. The RMS amplitude is defined as the average of the squared amplitude of the signal. Decibel notation (Vdb) is commonly used to express RMS. The decibel notation acts to compress the range of numbers required to describe vibration. Typically, ground-borne vibration generated by man-made activities attenuates rapidly with distance from the source of the vibration. Sensitive receptors for vibration assessment include structures (especially older masonry structures), people who spend a lot of time indoors (especially residents, students, the elderly and sick), and vibration-sensitive equipment, such as hospital analytical equipment and equipment used in computer chip manufacturing.

Applicable Noise Standards

The Noise Element of the Belmont General Plan (City of Belmont, 1982) establishes goals, policies, and standards for evaluating the compatibility of Motel/Hotel land uses with the on-site noise environment. According to the City's compatibility standards, hotels are considered "normally acceptable" when exposed to a ten-minute average level (L_{10}) of 65 dBA or less. An exterior noise exposure of L_{10} 65 to 75 dBA is considered "conditionally acceptable." An L_{10} of 75 to 80 dBA is considered "normally unacceptable" and a detailed analysis of noise reduction measures must be made and the needed noise insulation features included in the design. An L_{10} of greater than 80 dBA is considered "clearly unacceptable."

City of Belmont Municipal Code Section 15 Article VIII Noise Control Ordinance establishes guidelines to protect noise-sensitive receptors from excessive noise pollution. Under this ordinance, construction noise is allowed with a City permit during the hours of 8:00 a.m. to 5:00 p.m. Monday through Friday, and 10:00 a.m. to 5:00 p.m. on Saturdays. No construction activity or related activities are allowed outside of the aforementioned hours or on Sundays and Holidays. All gasoline-powered construction equipment must be equipped with an operating muffler or baffling system as originally provided by the manufacturer, and no modification to these systems is permitted. All noise sources, not related to construction, measured at the property line of a residential or non-residential property cannot exceed 55 dBA L_{eq} during the nighttime hours and 65 dBA L_{eq} during the daytime hours.

The City's general plan and municipal code do not provide guidance as to what would be considered a substantial noise increase associated with construction activities. For this analysis, a substantial noise increase would occur if construction noise were to exceed the FTA's construction noise criteria. The FTA has identified a daytime hourly L_{eq} level of 90 dBA as a noise level where adverse community reaction could occur (FTA, 2006). This noise level is used here to assess whether daytime construction-related noise levels would cause a substantial

temporary or periodic increase in ambient noise levels at sensitive receptor locations near the project site.

The San Mateo County Airport Land Use Commission (C/CAG, 1996) has compatibility standards for land uses exposed to noise from San Carlos Airport. These Standards indicate that hotels are compatible when exposed to a CNEL of less than 70 dBA.

Existing Noise Conditions

The existing noise environment in the immediate project area is dominated by traffic noise along Bayshore Freeway (U.S. 101) and aircraft flybys from San Carlos Airport. Land uses surrounding the project site mostly consist of commercial office buildings. The nearest residential land uses to the project site vicinity are located approximately 2,000 feet northwest, 2,200 feet northeast and 2,760 feet southwest of the project area. The nearest non-residential land uses to the project area are located within approximately 100 feet north and south of the project site.

To quantify the ambient noise levels in the project site vicinity, a noise measurement survey was conducted by Rose Goldberg Der & Lewitz, Inc. on January 7 – 8, 2015. The survey consisted of one 24-hour long-term and two 15-minute short-term noise measurements. The noise measurement locations are illustrated in **Figure 2-1**. The short-term noise monitors were located approximately 24 feet above the ground to represent elevated receivers on upper floors of the proposed buildings. The results of the 15-minute short-term noise measurements are shown in **Table 2-6**. The 24-hour long-term noise monitor was attached to a light pole near Shoreway Road, about 15 feet above the ground. The 24-hour long-term noise measurement found an ambient noise level of 73.6 dBA CNEL.

TABLE 2-6
SHORT-TERM AMBIENT NOISE MEASUREMENT RESULTS

Monitor	Location	Time	A-Weighted Noise Level, dBA					
			L_{eq}	L_{10}	L_{50}	L_{90}	Aircraft Events L_{max}	CNEL[1]
ST-1	Near U.S. 101, 29 feet above ground	1:10 pm - 1:25 pm	70	71	70	69	--	74
ST-2	Near Parking Lot, 29 feet above ground	2:00 pm - 2:15 pm	64	65	63	62	77	67
	Near Parking Lot, 5 feet above ground	2:00 pm - 2:15 pm	60	59	58	56	--	63

[1] CNEL calculated by correlating short-term measurement with long-term measurement at Location A (see Figure 2-1)

SOURCE: Rosen Goldberg & Lewitz, Inc., 2015

SOURCE: Rosen Goldberg & Lewitz, Inc. *Site Noise Assessment for: Springhill Suites Belmont, CA. January 29, 2015*

Belmont SpringHill Suites Hotel . 150195

Figure 2-1
Noise Measurement Locations

Discussion

a, c, d) **Less than Significant with Mitigation.** The project would result in short-term, temporary noise during construction and long-term noise from operational activities. These potential impacts are assessed below.

Construction

Construction activity noise levels at the project site would fluctuate depending on the particular type, number, and duration of usage for various pieces of construction equipment. Construction activities associated with the proposed project would involve preparation, grading and soil excavation, drainage and utilities, and building construction. Construction is expected to begin in March 2016 and would be completed in approximately 12 months. Approximately 1,370 cubic yards of existing fill would be removed from the site. After excavation, approximately 6,189 cubic yards of engineered fill would be imported to the site to raise it approximately 2 to 3 feet. Construction vehicles and equipment would include a concrete truck, material and supplies delivery trucks and trailers, excavators, bulldozers, wheeled loaders, fork lifts, and paving equipment. The project would not require pile driving. The construction staging area would be on-site. **Table 2-7** shows typical noise levels produced by various types of construction equipment.

TABLE 2-7
REFERENCE CONSTRUCTION EQUIPMENT NOISE LEVELS AT 50 FEET

Type of Equipment	L_{max}, dBA	Hourly L_{eq}, dBA / % Use
Backhoe	80	76 / 40%
Concrete Mixer Truck	85	81 / 40%
Loader	85	81 / 40%
Pneumatic Tools	85	82 / 50%
Air Compressor	81	77 / 40%

NOTES: % used during the given time period (usually an hour – Hourly L_{eq}) were obtained from the FHWA Roadway Construction Noise Model User's Guide, (FHWA, 2006).

SOURCE: Federal Transit Administration, 2006.

It is not anticipated that construction of the proposed project would result in substantially elevated ambient noise levels at sensitive land uses surrounding the project site. The nearest off-site residential and non-residential land uses to the proposed project are located 2,000 and 150 feet from the project site, respectively. Noise from construction activities generally attenuates at a rate of 6 dBA per doubling of distance (Caltrans, 2013). Assuming an attenuation rate of 6 dBA per doubling of distance and three of the loudest off-road construction equipment listed in Table 2-7 operating at the same time, the closest residential and non-residential land uses would be exposed to a noise level of approximately 54 and 77 dBA L_{eq}, respectively. These noise levels would not exceed the FTA construction noise threshold of 90 dBA L_{eq} and would not result in a substantial temporary noise increase. In addition, the applicant will comply with those construction

noise standards specified in the City's Noise Municipal Code (Section15, Article VIII, 15-102 Noise Limitations (f)), which outlines allowable construction hours and required improvement measures. Therefore, the short-term impact associated with intermittent construction noise would be ***less than significant***.

Operations

The project would result in long-term noise from vehicular traffic and mechanical equipment associated with hotel operations.

Mechanical Building Equipment. In regards to mechanical equipment, the proposed project would generate stationary-source noise associated with heating, ventilation, and air conditioning (HVAC) units. Such HVAC units typically generate noise levels of approximately 55 dBA at a reference distance of 100 feet from the operating units during maximum heating or air conditioning operations (Bolt, Baranek, and Newman, 1971). HVAC units are typically housed in equipment rooms or in exterior enclosures on the building's rooftop. Sensitive land uses located within approximately 100 feet of these HVAC units would be exposed to noise levels above the applied City of Belmont nighttime noise standard of 55 dBA L_{eq}. The nearest existing non-residential and residential land uses are located approximately 150 and 2,000 feet from the project site, respectively, and there are no planned residential uses within the project area. Since these land uses would be located beyond 100 feet from onsite HVAC units, noise generated by HVAC units would result in a ***less-than-significant impact***.

On-road Traffic. The effect of project generated traffic was calculated using traffic noise prediction equations found in the FHWA Traffic Noise Prediction Model (FHWA RD-77-108). **Table 2-8** shows the calculated project-generated traffic noise levels along roadways that are expected to have an increase in traffic due to the proposed project during existing, existing plus project, cumulative no project and cumulative plus project conditions. As shown in, the greatest effect on ambient levels would occur at the existing commercial land uses located along Shoreline Drive / Cormorant Drive, between Twin Dolphin Drive and project site driveway, where traffic noise would increase by 3.7 dBA. All other roadways analyzed are expected to experience traffic noise increase of 0.2 dBA or less. The City of Belmont does not define the levels at which permanent increases in ambient noise are considered "substantial." For this analysis, a readily noticeable increase of 5 dBA in traffic noise would be considered a significant impact. The highest increase in traffic noise at the commercial sensitive land uses (located adjacent to a roadway segment affected by the proposed project) is 3.7 dBA. This represents less than 5 dBA increase in roadway noise. Thus, the proposed project would not result in a significant increase in traffic noise from the proposed project versus the existing scenario; therefore traffic noise associated with the proposed project would be ***less than significant***.

Table 2-8 also compares cumulative year 2035 traffic noise levels, which accounts for cumulative traffic growth in the City of Belmont and surrounding environs to existing conditions. A significant cumulative impact would occur if the cumulative increase in

TABLE 2-8
TRAFFIC NOISE LEVELS ALONG ROADWAYS IN THE PROJECT VICINITY

Roadway Segment	Traffic Noise Level, dBA, L_{10}[1]									
	Existing	Existing Plus Project	Incremental Increase	Significant? (Yes or No)[2]	Cumulative Near Term No Project	Cumulative Near Term Plus Project	Incremental Increase	Cumulatively Considerable? (Yes or No)[2]	Incremental Increase	Overall Cumulatively Significant? (Yes or No)[2]
	A	B	(B - A)		C	D	(D - C)		(D - A)	
1. Redwood Shores Pkwy, Airport Way and Twin Dolphin Drive	70.1	70.1	0.0	No	70.8	70.9	0.0	No	0.8	No
2. Twin Dolphin Drive, Redwood Shores Pkwy and Shoreline Drive	64.2	64.4	0.2	No	65.2	65.3	0.1	No	1.1	No
3. Shoreline Drive / Cormorant Drive, Twin Dolphin Dr and project driveway	50.4	54.1	3.7	No	52.7	55.2	2.5	No	4.8	No
4. Twin Dolphin Drive, Shoreline Drive and Marine Pkwy	62.9	63.1	0.2	No	63.9	64.1	0.1	No	1.2	No
5. Marine Pkwy, Twin Dolphin Drive and Shoreway Road	65.7	65.7	0.0	No	66.1	66.1	0.0	No	0.5	No
6. Marine Pkwy, Shoreway Road and US-101	65.9	65.9	0.1	No	66.3	66.3	0.0	No	0.4	No
7. Ralston Avenue, U.S. 101 and Old County Road	64.4	64.4	0.0	No	65.3	65.3	0.0	No	0.9	No

BOLD values show potentially significant noise increases prior to any mitigation.

1 Noise levels 50 feet from roadway were determined using FHWA Traffic Noise Prediction Model (FHWA RD-77-108).
2 An increase in traffic noise above 5 dB is considered a substantial noise increase

SOURCE: ESA, 2015

traffic noise would be 5 dBA or greater. An increase in 5 dBA is considered readily noticeable to the average human being. As shown in Table 2-8, none of the roadway segments analyzed would result in a traffic noise increase greater than 5 dBA. Therefore, the cumulative impact to traffic noise would be ***less than significant***.

Proposed Project Noise Compatibility. With respect to new (proposed) on-site sensitive land uses, the City of Belmont General Plan states that indoor and outdoor areas of new projects shall be constructed such that they are not exposed to noise levels that exceed the City's noise standards. Therefore, an impact would be considered significant if the proposed hotel were exposed to transportation-related noise levels above 65 dBA L_{10}. The proposed sensitive land uses would be located approximately 100 feet from adjacent roadway centerlines Shoreline Drive / Cormorant Drive, between Twin Dolphin Drive and project driveway. As shown in Table 2-8, the calculated traffic noise generated by the proposed project from these roadway segments would be approximately 49.6 dBA L_{10} during existing plus project conditions and 50.7 dBA L_{10} during cumulative plus project conditions. These noise levels would be less than 65 dBA L_{10}; therefore, the impact would be considered ***less than significant***.

According to a site noise assessment conducted for this project, the CNEL at upper floors of the proposed hotel facing U.S. 101 would be up to 75 dBA (Rosen Goldberg & Lewitz, 2015). This corresponds to an L_{10} of 74 dBA, which is considered "conditionally acceptable" according to the Belmont General Plan. The state of California requires that interior noise levels be reduced to a CNEL of 45 dBA or less in habitable rooms. The building will need to provide noise reduction of up to 30 dBA to meet the State requirement. Implementation of **Mitigation Measure NOI-1** would reduce interior noise levels to meet the State requirement. Therefore, with implementation of identified mitigation, this impact would be considered a ***less than significant***.

> **Mitigation Measure NOI-1:** The following mitigation measures shall be implemented into the final design of the hotel, to reduce interior noise levels at the upper floors of the proposed hotel facing U.S. 101:
>
> - Windows with a sound transmission class (STC) rating of up to 36 shall be required in those upper floor rooms closest to the freeway that have glass/metal panel siding. Rooms that have stucco siding (e.g., 7/8-inch cement plaster) shall have a STC rating of 32.
>
> - Air-conditioning systems shall be included in the design to provide a habitable environment, which would reduce the need for windows to be opened in the upper floor hotel rooms.

b) **Less than Significant.** Construction activities would include site preparation, grading and soil excavation, drainage and utilities, paving, and building construction. Construction activities may generate perceptible vibration when heavy equipment or impact tools such as jackhammers or hoe rams are used. As previously discussed, the proposed project would not include the use of any off-road equipment known to generate

a substantial amount of vibration, such as pile driving and blasting. The potential use of bulldozers during fine-site grading would generate the highest vibration levels during construction. Large bulldozers typically generate vibration levels of 87 VdB at a distance of 25 feet (FTA, 2006). Assuming a large bulldozer would be used during the construction of the proposed project, the nearest non-residential noise sensitive land use located approximately 150 feet from the project site would be exposed to a vibration level of 63.7 VdB. According to the *Federal Transit Administration Guidance Manual for Transit Noise and Vibration Impact Assessment* (2006), the average human's perceptibility of vibration is about 65 VdB and human response to vibration is not usually significant unless the vibration exceeds 70 VdB. Because the groundborne vibration at the nearest sensitive land use, during on-site construction activities, would be below the human perception threshold, there would be no substantial vibration effects during construction. Consequently, construction of the proposed project would have a ***less-than-significant*** impact with respect to construction-vibration.

Mitigation: None required.

e, f) **Less than Significant.** San Carlos Airport, a general aviation airport occupying 160 acres within the City of San Carlos, is located approximately half a mile southeast of the project site. According to the San Mateo County Comprehensive Airport Land Use Plan (1996 ALUCP), hotels are compatible when exposed to a noise level less than 70 dBA CNEL. The 1996 ALUCP provides noise contours for land use noise exposure maps for San Carlos Airport for the year 1995. The project site is within the 55 dBA CNEL contour, but just outside the 60 dBA CNEL contour. Therefore, the project site is exposed to aircraft noise between 55 and 60 dBA CNEL. While noise associated with airports can adversely affect nearby land uses, the proposed project would not be adversely impacted by noise from San Carlos Airport.

According to the Draft Final Airport Land Use Compatibility Plan (2015 ALUCP) for San Carlos Airport dated April 2015, which is anticipated to be adopted in October 2015, the noise levels at the project site are between a 60 and 65 dBA CNEL. Therefore, based on these contours, aircraft noise exposure at the project site would be less than 70 dBA CNEL. As such, implementation of the proposed project would not expose people residing or working in the project area to excessive noise levels from this airport. This impact would be ***less than significant***.

Mitigation: None required.

Cumulative Impacts

The geographic context for changes in the noise and vibration environment due to development of the proposed project would be localized in mainly an urban area of the City of Belmont, as well as along roadways that would serve the proposed project. In order to contribute to a cumulative construction noise impact, another project in close proximity would have to be constructed at the same time as the proposed project. There are numerous

development projects in several locations near the proposed project, currently in the planning stages, that could be constructed and operational in the foreseeable future. These projects include the proposed 576-600 and 490 El Camino Real Mixed Used Development Projects, and the Autobahn Motors Dealership Reconstruction Project. These projects are located between 3,700 and 6,400 feet from the proposed project site.

The closest cumulative projects to the project area are the Autobahn Motors Dealership Reconstruction Project (3,700 feet from the project area) and 576-600 El Camino Real Mixed Use Development Project (5,030 feet from the project area). At these distances it is not likely that noise sensitive land uses located near the proposed project and other projects would result in a temporary increase in ambient noise levels during construction activities. In addition, the applicant would comply with all of the City's rules and regulations related to noise, which would further reduce construction noise levels. Therefore, cumulative construction noise impacts would be ***less than significant***.

As previously discussed under topic a, c and d, none of the roadway segments analyzed would result in a cumulative traffic noise increase that would be readily noticeable to the average human being. Therefore, cumulative traffic noise impacts would be ***less than significant***.

Mitigation: None required.

References

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2.2.13 Population and Housing

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
13. POPULATION AND HOUSING — Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b) Displace substantial numbers of existing housing units, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Discussion

a) **Less than Significant.** In general, a project would be considered growth-inducing if its implementation would result in substantial population increases and/or new development that might not occur if the project is not implemented.

The proposed project site is located in San Mateo County census tract 6086, which has a lower population than that of adjacent census tracts, due to the predominance of non-residential uses and proximity of the San Carlos Airport.

The City of Belmont is estimated to have a population of 26,400 residents in 2015, which is expected to increase to 29,600 by 2040 (ABAG, 2013).The existing property is a vacant lot upon which the project applicant proposes to construct a hotel with 169 rooms, which would primarily serve a transient population. As such, the project would not substantially increase the residential population of the City of Belmont.

Belmont's employment is estimated to be 8,790 in 2015, and employment is projected to grow to 10,450 by 2040 (ABAG, 2013).The project would provide employment for approximately 30 employees (with 15 on-site at any time). Therefore, project-related employment growth would amount to approximately 0.29 percent (almost 3 tenths of 1 percent) of citywide employment growth anticipated between 2015 and 2040, conservatively assuming that all employees would be new to Belmont; in actuality, some new workers at the hotel would be likely to have relocated from other jobs already in Belmont, or in the wider Bay Area. This potential increase in employment will have likely negligible impact compared to the total employment expected in Belmont and the greater San Mateo County.

The increased population and employment generated by the proposed project would not induce substantial population growth in the area, either directly or indirectly. The proposed project would be considered infill development, as it is a vacant site surrounded by existing development. The project would not extend any infrastructure or roadways

within the project vicinity, and infrastructure improvements associated with the proposed project would consist of local connections to the project site. Therefore, the proposed project would have a ***less-than-significant*** impact on population growth.

b, c) **No Impact.** The project site is vacant, with no history of residential use; therefore, the proposed project would not result in the displacement of any existing housing units or residents. There would be n**o impact**.

Mitigation: None required.

Cumulative Impacts

The hotel project would barely increase employment, and would not displace units and/or people. Therefore the project would not combine with past, present, or reasonably foreseeable future projects to result in significant cumulative impacts to population and housing. The impact to population and housing would be ***less than significant***.

Mitigation: None required.

References

Association of Bay Area Governments, 2013. Plan Bay Area Projections, 2013.

2.2.14 Public Services

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
14. PUBLIC SERVICES — Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:				
i) Fire protection?	☐	☐	☒	☐
ii) Police protection?	☐	☐	☒	☐
iii) Schools?	☐	☐	☒	☐
iv) Parks?	☐	☐	☒	☐
v) Other public facilities?	☐	☐	☒	☐

Discussion

a.i) **Less than Significant.** The Belmont Fire Protection District provides fire protection services and emergency medical services throughout the City of Belmont. The district shares fire management services with the neighboring cities of San Mateo and Foster City. The district has approximately 21 firefighters that are trained to respond to fires, medical emergencies and hazardous materials incidents. Additionally, fire companies provide resources to assist in delivering community inspection services, public education and informational programs. The District operates three engine companies out of each station for a total of six engine companies (BFD, 2013).

The District operates out of two fire stations, including: Station 14 located 911 Granada Street, approximately 1.5 miles northwest of the project site, and Station 15 located at 2701 Cipriani Boulevard, approximately 3.4 miles west of the project site. Considering the direct proximity to Station 14, response time would be well within the goal of 6 minutes, for 85 percent of the time, as established by the Belmont Fire Department (BFD, 2015).

Although the proposed project does not include permanent residential uses, an increase in population on the project site due to increase of onsite staff and guests, as well as an increase in vehicular traffic on the site, could lead to an incremental increase in the demand for fire suppression and emergency medical services and an increase in traffic-related emergencies. In accordance with standard City practices, the Department would review project plans before permits are issued to ensure compliance with all applicable fire and building code standards and to ensure that adequate fire and life safety measures are incorporated into the project in compliance with all applicable state and city fire safety regulations.

Because the proposed project would be required to comply with City standards and the proposed project is not anticipated to generate substantial additional demand for fire protection services, and subsequently, would not result in the need for new or expanded facilities, the project's potential impact on fire protection services would be ***less than significant***.

Mitigation: None required.

a.ii) **Less than Significant.** The Belmont Police Department (BPD) is headquartered at One Twin Pines Lane in Belmont, 1.7 miles to the west of the project site. BPD patrols the City of Belmont 24 hours a day, 7 days a week. In addition to regular patrols, BPD implements Problem Oriented Policing (POP) to work more closely with the community and schools to address specific local law enforcement issues.

Given the proposed project is not anticipated to substantially increase population onsite (or substantially increase demand for police protection services onsite), BPD would be able to meet any slight increased demand for policing services in the project area without the need to construct new facilities or expand existing facilities. Furthermore, the project would not be anticipated to affect police response times. Therefore, the project would result in a ***less-than-significant*** impact on the provision of police protection services.

Mitigation: None required.

a.iii) **Less than Significant.** The project site is within the area served by the Belmont Redwood Shores School District, which operates elementary schools and one middle school. High school students in Belmont attend Carlmont High School, which is part of the Sequoia Union High School District.

Based on the planned development and its use, any increases in the number of school-age children that may result from the project would be negligible, and attributed to the staff working on the site (estimated to be a maximum of approximately 30 people), most of whom would likely already be residents of Belmont or surrounding/nearby communities.

The Leroy F. Greene School Facilities Act of 1988, or Senate Bill 50 (SB 50), restricts the ability of local agencies, such as the City of Belmont, to deny land use approvals on the basis that public school facilities are inadequate. Prior to issuance of building permits, the project applicant would be required to pay school impact fees for hotel space to offset any potential impacts to school facilities from the proposed project. Payment of these required fees is the mandated mitigation measure for impacts to affected public schools under CEQA. Given the project applicant would be required to comply with SB 50, and given the project would not increase residential population, the project's potential impact on schools would be ***less than significant***.

Mitigation: None required.

a.iv, v) **Less than Significant.** The City of Belmont manages 14 developed parks on 31 acres of land, 337 acres of open space lands, and 27 acres of City and School District-owned athletic fields (Belmont, 2015). The Land use and Open Space Element of the *General Plan* designates parkland as either Parks or Open Space, and identifies either neighborhood-serving parks or community-wide parks. The General Plan calls for a standard of around 8.5 acres of neighborhood and community-wide parkland per 1,000 residents. With an estimated 27,000 residents in 2014, the City currently exceeds this standard with around 12.5 acres of communitywide parkland per one thousand residents (Census, 2015). The General Plan does not have a parkland standard pertaining to open space, but rather includes policies supporting the designation and preservation of lands as such. The nearest park to the project site is O'Donnell Park, located approximately half a mile to the northwest. Alexander Park and Twin Pines Park are also located less than 1 mile from the project site. The City has established a Park Impact Fee (November 2014). Commercial projects (such as the proposed hotel development) are subject to this fee, which is based on commercial building square footage.

As noted above, the proposed project would result in little, if any, population increase in Belmont. In addition, the hotel amenities include an exercise room, a swimming pool, and a 1,312-sq.-ft. outdoor patio, and it is unlikely that the hotel patrons would use off-site recreational facilities. Therefore, no new construction of parks, open spaces or other public facilities would be required, and the proposed project would result in a ***less-than-significant*** impact to parks and public facilities.

Mitigation: None required.

Cumulative Impacts

Less than Significant. Operation of the proposed project, in combination with past, present, and reasonably foreseeable future projects in the vicinity, could result in a significant cumulative impact on public services if an increase in demand for such services required the construction of new facilities.

The geographic scope of potential cumulative impacts on public services includes the City of Belmont. All cumulative projects identified in the vicinity have the potential to increase demand for public services. Commercial or light industrial projects in the vicinity do not generally result in a significant population increase in the City and therefore would not be anticipated to significantly increase demand for these services. In addition, such projects would undergo design review to ensure adequate safety measures are included in all project plans. Projects that propose to construct new residential units would increase the demand for all public services, but in particular could require the construction of new public schools or parks and open space facilities to meet an increased demand. Because the project proposes visitor-serving commercial uses there is a relatively small permanent population increase associated with the project, and the resulting increase in demand for public services would be incremental. Therefore, the

project's contribution to such impacts would be considered less than considerable. The cumulative impact would be ***less than significant***.

Mitigation: None required.

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2.2.15 Recreation

Issues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
15. RECREATION — Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated?	☐	☐	☐	☒
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☐	☒

Discussion

a, b) **No Impact.** Belmont has 14 developed parks on 31 acres, as well as 337 acres of open space for outdoor activities. This amounts to approximately 13.7 acres of combined parkland and open space per 1,000 residents. As stated in Section 14, Public Services, there are three parks located less than one mile from the project site. Because the proposed project would involve the development of a hotel whose primary use would be for temporary lodging and not permanent residential units, it is likely that the hotel patrons would not use off-site recreational facilities. The hotel amenities include an exercise room, a swimming pool, and a 1,312 sq. ft. outdoor patio. The project applicant does not propose to construct any recreational facilities outside of the project site boundaries, and the project would not require the expansion of existing facilities. In addition, the City has established a Park Impact Fee, and commercial projects (such as the proposed hotel development) are subject to this fee, which is based on commercial building square footage. Therefore, the proposed project would not increase the use of neighborhood-serving or communitywide parks and the project would result in ***no impact***.

Mitigation: None required.

Cumulative Impacts

Less than Significant. Operation of the proposed project, in combination with past, present, and reasonably foreseeable future projects in the vicinity, could result in a significant cumulative impact on parks and recreational facilities.

The geographic scope of potential cumulative impacts on parks and recreation facilities includes the City of Belmont. All cumulative projects identified in the vicinity have the potential to increase demand for parks and recreation facilities. Commercial or light industrial projects in the vicinity do not generally result in a significant population increase in the City and therefore would not be anticipated to significantly increase demand for parks and recreation facilities. Projects that propose to construct new residential units would increase the demand for all public services, but in particular could

require the construction of new facilities to meet an increased demand. Because the project proposes visitor-serving commercial uses there is a relatively small permanent population increase associated with the project, and the resulting increase in demand for public services would be incremental. Therefore, the project's contribution to such impacts would be considered less than considerable. The cumulative impact would be ***less than significant***.

2.2.16 Transportation and Traffic

Topics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
16. TRANSPORTATION AND CIRCULATION— Would the project:					
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒	☐	☐
b) Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location, that results in substantial safety risks?	☐	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses?	☐	☐	☒	☐	☐
e) Result in inadequate emergency access?	☐	☐	☒	☐	☐
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☒	☐	☐

The information below is summarized from a background Transportation Impact Study prepared for the proposed project, consistent with the *City of Belmont Guidelines for Traffic Impact Studies* (Fehr & Peers, 2015).

Setting

The project site is located within the City of Belmont on the southeast corner of Shoreway Road and Cormorant Drive. The site is accessible from U.S. Highway 101 (U.S. 101) via Shoreway Road or Twin Dolphin Drive, both of which connect to the major east-west roadways in the vicinity: Ralston Avenue/Marine Parkway and Holly Street/Redwood Shores Parkway.[9] These roadways also provide connections to office and residential areas, downtown Belmont, and the Belmont and San Carlos Caltrain stations. The following roadways are present in the study area:

[9] For the purposes of this report, U.S. 101 and streets parallel are described as oriented north-south, and Ralston Avenue and streets parallel are described as oriented east-west.

- U.S. 101 is the major north-south freeway providing regional access, with four lanes plus an auxiliary lane in each direction and interchanges at Ralston Avenue and Holly Street.
- Ralston Avenue (four-lane)/Marine Parkway (six-lane) is an east-west arterial roadway with a center median. Ralston Avenue has some on-street parking west of the U.S. 101 interchange and is a designated Class III bicycle route.
- Holly Street (four-lane)/Redwood Shores Parkway (six-lane) is an east-west arterial roadway with no on-street parking. Redwood Shores Parkway has Class II bicycle lanes.
- Shoreway Road is four-lane, north-south roadway parallel to U.S. 101 between Ralston Avenue and Holly Street, with Class II bicycle lanes south of the project site.
- Twin Dolphin Drive is a four-lane, north-south roadway with a center median between Marine Parkway and Holly Street/Redwood Shores Parkway, with a designated Class III bicycle route.
- Shoreline Drive/Cormorant Drive is a two-lane, east-west roadway between Shoreway Road and Redwood Shores Parkway.
- Old Country Road is a two-lane, north-south roadway east of U.S. 101, designated as a Class III bicycle route. It runs along the east side of the Caltrain right-of-way.
- El Camino Real is a four-lane, north-south roadway east of Old Country Road, on the west side of the Caltrain right-of-way.

The project site is served by several SamTrans bus lines, and these routes connect to other SamTrans routes and to regional transit routes. There are four SamTrans lines (Route 60, Route 67, Route 260, Route 261) with stops within a reasonable walking distance of the project site. The closest stops are located at the intersection of Marine Parkway/Twin Dolphin Drive (Route 60, Route 67) and Redwood Shores Parkway/Shoreway Road (Route 260, Route 261), both of which are 0.7 mile, or approximately a 15-minute walk, from the project site.

Other nearby routes are Route 295, Route 397, Route 398, Route ECR, Route FLX San Carlos, and Route KX, all of which have stops about 1.5 miles from the project site at the San Carlos Caltrain Station. Caltrain provides regional commuter rail service between San Francisco and San Jose in local, limited-stop, and Baby Bullet (express) service. Only local and limited-stop trains serve the Belmont Station and San Carlos Station, although Caltrain provides a free shuttle from the Belmont Station to the Hillsdale Train Station for Baby Bullet Service. The Belmont Caltrain Station is 1.5 miles from the project site.

a, b) **Less than Significant.** To determine whether the proposed project would conflict with a transportation- or circulation-related plan, ordinance, or policy, this section analyzes the proposed project's effects on intersection and freeway operations, transit demand, and pedestrian and bicycle circulation, as well as construction impacts.

Existing Plus Project Impacts. The project would result in less-than-significant impacts to transportation and circulation, as discussed below.

Trip Generation

This study uses trip generation rates for the hotel land use category in the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (9th Edition), as well as information regarding number of hotel employees and their shift times from the project applicant; the hotel sites surveyed for the ITE manual had an 83-percent average weekday room occupancy rate. As shown in **Table 2-9**, the proposed project would generate 90 a.m. peak-hour vehicle trips (53 inbound and 37 outbound) and 102 p.m. peak-hour vehicle trips (52 inbound and 50 outbound).

TABLE 2-9
PROPOSED PROJECT WEEKDAY VEHICLE TRIP GENERATION[1]

Land Use	Size	Trip Generation Rates		Project-Generated Trips					
				AM Peak Hour			PM Peak Hour		
		AM Peak Hour	PM Peak Hour	In	Out	Total	In	Out	Total
Hotel	169 rooms	0.67	0.70	53	37	90	52	50	102
Employees[2]*: 15 daytime, 6 nighttime*				*15*	*6*	*21*	*6*	*15*	*21*
Guests: 83% occupancy (average)				*38*	*31*	*69*	*46*	*35*	*81*

NOTES:
1 Institute of Transportation Engineers (ITE) Trip Generation Manual, 9th Edition (2012). Land Use Code 310 (trips per room). The average occupancy rate for the surveyed hotels was 83 percent.
2 Per project applicant, the project would have approximately 12 to 15 employees between the hours of 8:00 a.m. and 5:00 p.m. and approximately 4 to 6 employees between the hours of 5:00 p.m. and 8:00 a.m.

SOURCE: Fehr & Peers, 2015.

Intersection Levels of Service. Traffic operating conditions are described using the concept of "level of service" (LOS), which is a description of the quality of traffic flow from the motorist's perspective, based on factors such as speed, travel time, delay, and freedom to maneuver. The LOS conditions are described using six grades, ranging from LOS A (best operating conditions) to LOS F (worst operating conditions). The proposed project would result in minor changes to the average delay per vehicle at the study intersections during the a.m. and p.m. peak hours. As shown in **Table 2-10**, under Existing Plus Project Conditions, all but one of the study intersections would operate at the same levels of service as under Existing Conditions, and all but one would operate at LOS D or better. Although the project would cause the level of service at the Shoreline Drive / Twin Dolphin Drive intersection to worsen from LOS B to LOS C during the a.m. peak hour, the increased delay (one second) would be less than the ten-second threshold of significance for LOS B conditions, pursuant to *City of Belmont Guidelines for Traffic Impact Studies*. The Ralston Avenue / El Camino Real intersection would continue to operate at LOS E during both a.m. and p.m. peak hours, with an increased delay of two seconds during the a.m. peak hour, and no increase in delay during the p.m. peak hour. The project-caused increase in delay must be four seconds with LOS E conditions to result in a significant impact. The other increases in delay, with no change to the LOS (up to three seconds) also would be less than the City-prescribed thresholds of significance. The unsignalized

TABLE 2-10
SUMMARY OF PEAK HOUR INTERSECTION LEVEL OF SERVICE (LOS), WITHOUT AND WITH THE PROPOSED PROJECT

Intersection	Control[1]	Peak Hour	Existing (2015)		Existing + Project		Cumulative (2040)		Cumulative + Project	
			Delay[2,3]	LOS[2,3]	Delay[2,3]	LOS[2,3]	Delay[2,3]	LOS[2,3]	Delay[2,3]	LOS[2,3]
1. Holly Street / Shoreway Road	Signal	AM PM	19 32	B C	19 33	B C	39 42	D D	40 44	D D
2. Redwood Shores Parkway / Twin Dolphin Drive	Signal	AM PM	14 14	B B	14 14	B B	16 17	B B	16 17	B B
3. Shoreline Drive / Twin Dolphin Drive	Signal	AM PM	20 14	B B	20 15	C B	19 16	B B	19 18	B B
4. Shoreline Dr./ Cormorant Dr. / existing driveways	SSSC	AM PM	<10 (SB) <10 (NB)	A A	<10 (SB) <10 (NB)	A A	<10 (SB) <10 (NB)	A A	10 (SB) <10 (NB)	B A
5. Marine Parkway / Twin Dolphin Drive	Signal	AM PM	<10 13	A B	<10 13	A B	<10 16	A B	<10 17	A B
6. Marine Parkway / Shoreway Road	Signal	AM PM	16 37	B D	16 38	B D	18 31	B C	19 31	B C
7. Ralston Avenue / U.S. 101 NB off-ramp	Signal	AM PM	23 45	C D	23 46	C D	28 **61**	C **E**	29 **62**	C **E**
8. Ralston Avenue / U.S. 101 SB off-ramp	Signal	AM PM	12 <10	B A	12 <10	B A	13 <10	B A	13 <10	B A
9. Ralston Avenue / Old Country Road	Signal	AM PM	24 23	C C	24 24	C C	**59** **56**	**E** **E**	**60** **56**	**E** **E**
10. Ralston Avenue / El Camino Real	Signal	AM PM	**56** **56**	**E** **E**	**58** **57**	**E** **E**	**>80** **>80**	**F** **F**	**>80** **>80**	**F** **F**

NOTES:

1 Signal = signalized intersection; SSSC = side-street stop controlled intersection
2 Traffic operations results include delay (seconds per vehicle) and LOS (level of service). LOS is based on delay thresholds published in the 2010 Highway Capacity Manual (Transportation Research Board, 2010). For SSSC intersections, the delay and LOS for the worst approach is shown (i.e., SB [Southbound] or NB [Northbound]).
3 **Bold** denotes LOS E or LOS F. Shading denotes a significant impact.

SOURCE: Fehr & Peers, 2015.

intersection at Shoreline Drive / Cormorant Drive and the existing driveways at the northeast corner of the project site would not meet the Peak Hour Volume Signal Warrant for the Existing Plus Project a.m. or p.m. peak hours. For these reasons, the project impact to intersection levels of service would be ***less than significant***.

Mitigation: None required.

Freeway Segment Levels of Service. Existing plus project freeway operations were evaluated using the 2010 *Highway Capacity Manual* methodology. LOS on each segment was determined based on vehicle density and volume-to-capacity ratios, as calculated using the freeway volumes and the ramp volumes at each location. **Table 2-11** shows that all segments would continue to operate at LOS D or better during both peak periods under Existing Plus Project Conditions, which would be in compliance with the adopted LOS standard (LOS E or better) set by the City/County Association of Governments of San Mateo County (C/CAG) Congestion Management Program (CMP). The proposed project would have a ***less-than-significant*** impact on freeway segments.

Mitigation: None required.

Mass Transit and Non-Motorized Travel. As described in more detail under criterion "f" below, the proposed project is not anticipated to generate a substantial number of new transit riders or bicycle trips, and the project's generated pedestrian trips would be dispersed over adequate sidewalks and walkways. The proposed project would have a ***less-than-significant*** impact on transit and non-motorized travel.

Mitigation: None required.

Cumulative Impacts

The project would result in less-than-significant cumulative impacts to transportation and circulation, as discussed below.

Traffic

The Cumulative 2040 traffic volumes in the project study area are based on expected annual traffic growth rates between 2015 and 2040 derived from the C/CAG regional travel demand model, including land use changes consistent with ABAG *Projections* 2013, as well as funded regional transportation projects.

Intersection Levels of Service. As shown in Table 2-10 above, under cumulative conditions, the study intersections would continue to operate at the same levels of service with the addition of traffic from the proposed project. Most intersections would continue to operate at LOS D or better during both peak hours. The intersections that would operate at LOS E or LOS F without the project would continue to operate at the same LOS and would experience, at most, a one-second increased delay, which is less than the four-second threshold of significance established by the *City of Belmont Guidelines for Traffic Impact Studies*. The other increases in delay, with no change to the LOS (up to two seconds) also

TABLE 2-11
SUMMARY OF PEAK HOUR FREEWAY SEGMENT LEVEL OF SERVICE (LOS), WITHOUT AND WITH THE PROPOSED PROJECT

Freeway Segment	Type[1]	Peak Hour	Existing (2015)		Existing + Project		Cumulative (2040)		Cumulative + Project	
			Density[2,3]	LOS[2,3]	Density[2,3]	LOS[2,3]	Density[2,3]	LOS[2,3]	Density[2,3]	LOS[2,3]
Northbound U.S. 101										
Harbor Blvd. to Ralston Ave. Off-Ramp	Basic	AM	24	C	24	C	**37**	**E**	**37**	**E**
		PM	19	C	19	C	29	D	29	D
Ralston Avenue Off-Ramp	Basic	AM	24	C	24	C	**37**	**E**	**37**	**E**
		PM	19	C	19	C	29	D	29	D
Ralston Avenue Interchange 1	Basic	AM	25	C	25	C	**39**	**E**	**39**	**E**
		PM	22	C	22	C	35	D	35	D
Ralston Avenue Eastbound On-Ramp	Merge	AM	28	D	28	D	**45**	**E**	**45**	**E**
		PM	27	C	27	C	**41**	**E**	**41**	**E**
Ralston Avenue Interchange 2	Basic	AM	28	D	28	D	**45**	**E**	**45**	**E**
		PM	25	C	25	C	**41**	**E**	**41**	**E**
Ralston Avenue Westbound On-Ramp	Basic	AM	24	C	24	C	**35**	**E**	**35**	**E**
		PM	26	C	26	C	**39**	**E**	**39**	**E**
Southbound U.S. 101										
Hillsdale Blvd. On-Ramp to Ralston Ave. Off-Ramp	Basic	AM	30	D	30	D	**37**	**E**	**37**	**E**
		PM	24	C	24	C	32	D	32	D
Ralston Avenue Off-Ramp	Basic	AM	30	D	30	D	**37**	**E**	**37**	**E**
		PM	24	C	24	C	32	D	32	D
Ralston Avenue Interchange	Basic	AM	30	D	30	D	**36**	**E**	**36**	**E**
		PM	24	C	24	C	33	D	33	D
Ralston Ave. / Harbor Blvd. On-Ramp	Basic	AM	28	D	28	D	33	D	33	D
		PM	24	C	24	C	33	D	33	D

NOTES:

1 Basic segment may refer to freeway segments between on/off-ramps or on/off-ramps with auxiliary lane > 1,500 feet.
2 Freeway operations results include density (passenger cars per mile per lane) and LOS. LOS is based on density thresholds published in the Highway Capacity Manual 2010 (Transportation Research Board, 2010).
3 **Bold** denotes LOS E or LOS F. Shading denotes a significant impact.

SOURCE: Fehr & Peers, 2015.

would be less than the City-prescribed thresholds of significance. The unsignalized intersection at Shoreline Drive/Cormorant Drive and the existing driveways at the northeast corner of the project site would not meet the Peak Hour Volume Signal Warrant for the Cumulative Plus Project a.m. or p.m. hours. Therefore, the project impact to cumulative intersection levels of service would be ***less than significant.***

Freeway Segment Levels of Service

As shown in Table 2-11 above, under cumulative conditions, freeway segments would operate at LOS E or better, and would continue to operate at the same levels of service during the a.m. and p.m. peak periods with the addition of the proposed project. Therefore, these freeway segments would operate in compliance with the adopted LOS standard (LOS E or better for study segments) set by the C/CAG CMP, and the proposed project would have a ***less-than-significant*** impact on freeway segments.

Mitigation: None required.

Construction Activities

Project construction would last about 12 months, generally occurring 8:00 a.m. and 5:00 p.m. Monday through Friday and 10:00 a.m. to 5:00 p.m. on Saturdays. No construction activity is allowed on Sundays or Holidays. Staging would occur on site. As is standard procedure as part of the building permit process, any temporary sidewalk, parking, or traffic lane closures would be coordinated with the City of Belmont in order to minimize the impacts on traffic. The impact of construction truck traffic would be a temporary lessening of the capacities of local streets due to the size, slower acceleration, and larger turning radii of trucks, which may temporarily affect traffic operations and increase traffic, pedestrian, and bicycle conflicts near the project site. Truck traffic to and from the site would be routed along major arterials and freight routes. Overall, because construction activities would be temporary and limited in duration and activities are required to be conducted in accordance with City requirements, construction-related transportation impacts of the proposed project would be ***less than significant***.

Mitigation: None required.

c) **No Impact.** The proposed project would not result in a change of air traffic patterns, and thus would not result in substantial safety risks related to air traffic. There would be ***no impact***. Please see Section 2.2.10, Land Use and Land Use Planning, and Section 2.2.12, Noise, regarding the proposed project's consistency with the San Carlos Airport Land Use Compatibility Plan and airport operations.

Mitigation: None required.

d) **Less than Significant**. The proposed project would not include any design features that would substantially increase traffic hazards (e.g., no new sharp curves or dangerous intersections), and would not include any incompatible uses, as discussed above in Section 2.2.10, Land Use and Land Use Planning. Access to the project site would be via

an existing private driveway located at the northeast corner of the project site, as well as directly off Cormorant Drive directly across from the Nikon Precision, Inc. driveway. The latter access point would require partial demolition of the existing median that separates westbound and eastbound traffic on Cormorant Drive. All aisle ways depicted on the site plan would meet Belmont Zoning Code Off-Street Parking and Loading width requirements. In addition, sight distances for drivers traveling along Cormorant Drive would exceed the minimum recommended stopping sight distances recommended by the American Association of State Highway and Transportation Officials (AASHTO) guidelines. Therefore, transportation hazards would be ***less than significant.***

Mitigation: None required.

e) **Less than Significant.** The street network serving the project area currently accommodates the movements of emergency vehicles that travel to the project site. In the event of an emergency under project conditions, vehicles would access the project site via an existing private driveway located at the northeast corner of the project site, as well as directly off Cormorant Drive directly across from the Nikon Precision, Inc. driveway. In addition, a third access point would be available at the southeast corner of the project site. Because there would be at least two points of access for emergency vehicles, the proposed project's impact to emergency vehicle access would be ***less than significant***.

Mitigation: None required.

f) **Less than Significant.** The proposed project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, as discussed below.

Public Transit

As stated above, the nearest transit stops to the project site are approximately 0.7 mile away, located to the north at the intersection of Marine Parkway/Twin Dolphin Drive, and to the south at the intersection of Redwood Shores Parkway/Shoreway Road. These stops—for SamTrans Routes 60, 67, 260, and 261—are approximately a 15-minute walk from the project site. Although this distance would be considered reasonable for transit access, the proposed project is not anticipated to generate a substantial number of new transit riders. Therefore, the project would result in a ***less-than-significant*** impact to transit conditions.

Bicycle Facilities

Immediate bicycle access to the project site would be provided along Shoreway Road and Cormorant Drive/Shoreline Drive. The proposed project would not generate substantial new bicycle trips in the area. Therefore, the project would result in a ***less-than-significant*** impact to bicycle site access and circulation.

Pedestrian Facilities

Pedestrians would use the existing sidewalks on Shoreway Road and Cormorant Drive to access the project site. A new pedestrian walkway would extend from the hotel's main lobby entrance northward across the parking lot and Cormorant Drive to the Nikon Precision, Inc. property. An opening in the median would provide a refuge island for pedestrians crossing Cormorant Drive. Other pedestrian entries would be provided along the western and southern sides of the hotel.

Therefore, the project's generated pedestrian trips would be dispersed over adequate sidewalks and walkways. The proposed project would have a ***less-than-significant*** impact on pedestrian site access and circulation.

Mitigation: None required.

References

Belmont, City of, *City of Belmont Guidelines for Traffic Impact Studies*, available online: http://www.belmont.gov/home/showdocument?id=10822, accessed July 2, 2015.

Fehr & Peers, *Belmont SpringHill Suites Hotel: Transportation Impact Study*, Final Draft July 2015.

2.2.17 Utilities and Service Systems

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
17. UTILITIES AND SERVICE SYSTEMS — Would the project:				
a) Conflict with wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
c) Require or result in the construction of new storm water drainage facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐
e) Result in a determination by the wastewater treatment provider that would serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

Discussion

a, b, e) **Less than Significant.** The City of Belmont Public Works Department owns and maintains the wastewater collection system, which consists of approximately 85 miles of gravity sewer pipelines, ranging in size from 4 to 27 inches in diameter, 11 wastewater pump stations and approximately five miles of force mains. All wastewater pump stations have redundant pumps and five stations have on-site backup generators, with additional standby generators planned for two stations planned for installation in 2015. Wastewater flows from the City's collection system to the Silicon Valley Clean Water (SVCW) wastewater treatment plant (WWTP) via the SVCW Shoreway Pump Station, located on Shoreway Road, which can convey up to 12 million gallons per day (mgd) to the SVCW WWTP. The City has discharge rights of 11.8 mgd peak wet weather flow and 2.74 mgd dry weather flow with SVCW, which is approximately 10 percent of the plant's total capacity (Belmont, 2010 and SVCW, 2008).

The SVCW WWTP is located at 1400 Radio Road in Redwood City and owned by the West Bay Sanitary District and the cities of Belmont, Redwood City, and San Carlos. The SCVW facility serves more than 200,000 residents and businesses within its service area and is designed to remove 97 percent of all solids, organic material, and pathogens from the wastewater it treats. Treated wastewater from the facility is discharged to the San Francisco Bay through a 66-inch outfall diffuser located 1 mile offshore (SVCW, 2015).

The proposed project is expected to generate approximately 230 gallons of wastewater per minute, resulting in the generation of 331,000 gallons of wastewater per day or 1.2 million gallons per year (Belmont, 2015b). This would comprise approximately 2.8 percent of the City's total peak wet weather flow allotment and 12 percent of the City's dry weather flow allotment with SVCW. The project utility plans indicate that an 830-foot linear connection will be required to connect the site with the City's pump station. Prior to project approval, a sewer system impact analysis would be completed for the project which would identify potential capacity issues in the surrounding area. The project applicant would be required to fund any necessary upsize or upgrade identified in the analysis.

The amount of wastewater that is anticipated to be generated by the project is incremental and would not exceed the wastewater treatment requirements of the San Francisco Bay Regional Water Quality Control Board (RWQCB). Furthermore, other than extending the existing infrastructure to the project site, no additional wastewater treatment facilities would need to be constructed to accommodate the proposed project. For these reasons, the project's impact to sanitary sewer would be ***less than significant***.

Mitigation: None required.

c) **Less than Significant.** The storm drainage system in the City of Belmont includes more than 28 miles of storm drain pipes and two pump stations (Belmont, 2015a). Storm water in Belmont generally flows from the hills eastward to the developed flatlands. It then flows through the underground storm drains and culverts to the San Francisco Bay via Belmont Creek, Laurel Creek, O'Neill Slough, and Island Park. The Belmont and Redwood City Public Works Departments are responsible for the maintenance of the local storm drainage system within public areas and roads.

The proposed project site is located in a developed urban area that is served by the existing storm drainage system. The project site consists of predominantly pervious surfaces, with only 7,165 square feet of impervious surfaces located on the site that occupies a total of 151,540 square feet. The project would introduce an additional 90,785 square feet of impervious surfaces, for a total of 97,950 square feet, which would result in an incremental increase in stormwater runoff over existing conditions. The project would be designed to implement Municipal Stomwater Permit (MRP) Stormwater Controls for Development Projects C.3 standards to minimizing the change in stormwater runoff volume and the timing of peak flows. The project's stormwater flow rate will be at or below pre-project flow rates for the design storm events required by each jurisdiction. Infiltration will be utilized to the extent practical. The project would not require or result in the construction of new storm water drainage facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects. The impact would be ***less than significant***.

Mitigation: None required.

b, d) **Less than Significant.** The City of Belmont receives its potable water from the Mid-Peninsula Water District, which supplies water to approximately 26,030 customers within its total estimated 5 square-mile service area, which includes Belmont and portions of the City of San Carlos and unincorporated San Mateo County. The District purchases its water from the San Francisco Public Utilities Commission (SFPUC), and the water is delivered via a 20-inch water transmission pipeline that is connected to the SFPUC system in Redwood City and via a 24-inch pipeline connected to a pump station on the SFPUC watershed property near the Pulgas Water Temple. Water from the regional system is treated by SFPUC before delivery to the District. Under a 2009 Water Supply Agreement (WSA) with SFPUC, the District is guaranteed to receive at least 3.71 mgd in water deliveries through 2018 and 3.89 mgd in deliveries from 2019 to 2034. From 1985 to 2010, the District's water use has fluctuated between 2.83 mgd and 3.67 mgd, and the District estimates that the demand for water will reach up to 4.0 mgd by 2035 (MPWD, 2010).

As stated above, it is estimated that the project would produce 331,000 gallons of wastewater per day or 1.2 million gallons per year (Belmont, 2015b). Assuming that wastewater comprises 90 percent of total water demand, the estimated water demand attributed to the proposed project is about 368,000 gallons per day (gpd). This amount is would not be expected to exceed the District's water supply capacity. The District has indicated that it will have adequate water supply to meet increased demand from population and employment growth through 2035. The proposed project would not be anticipated to significantly increase demand on existing water supplies or entitlements. The proposed project would demonstrate compliance with the California Building Code Title 24 standards by installing water efficient fixtures and irrigation systems. Prior to project approval, the District would review the project plans to determine the capacity of the District and surrounding water system to supply the project. If the system is found to be inadequate in meeting the requirements of the project, the project applicant would be required to provide water system improvements and/or pay the required installation fees. Since the projected water demand is anticipated to be a small percentage of the City's total demand and since no new facilities would need to be constructed as a result of this project, the project's impact on water provision would be ***less than significant***.

Mitigation: None required.

f, g) **Less than Significant.** All residential and commercial solid waste generated in the City of Belmont is collected by the City's franchise hauler, Recology of San Mateo. In 2014, the City disposed of a total of 13,600 tons of waste in 14 separate landfills, a majority of which (92%) was sent to the Corinda Los Trancos (Ox Mountain) Landfill, located at 12310 San Mateo Road in Half Moon Bay (CalRecycle, 2015a). This landfill has an estimated permitted capacity of 69 million cubic yards, a daily permitted capacity of 3,598 tons per day, and an estimated remaining capacity of about 27 million cubic yards as of 2011 (CalRecycle, 2015b). CalRecycle estimates that the typical hotel generates 2 lbs/room/day of solid waste (CalRecycle, 2015c). Using these estimates the project would produce, at maximum, 61.7 metric tons per year, which equates to 0.001 percent

(one thousandth of 1%) of the landfill's annual capacity of 1.3 million tons. Based on these findings, the project's impact on solid waste would be ***less than significant***.

Assembly Bill 939 states that all cities must divert 50 percent of their solid waste from landfills by December 31, 2000. On September 26, 2008, SB 1016 was enacted to build on compliance requirements of AB 939, changing the indicator to a per capita disposal rate beginning in 2007. In 2011, AB 341 was signed. AB 341 raises the statewide waste diversion target to 75 percent diversion by 2020 and requires businesses and multi-family developments to arrange for recycling services on and after July 1, 2012. The City of Belmont has implemented a total of 40 waste diversion programs that has allowed it to exceed its per-resident disposal rate target (PPD) of 5.3 and its per-employee disposal rate target (PPD) of 20.3 each year since SB 1016 was enacted in 2007. In the last approved reporting year, 2013, the city's annual per resident disposal rate was 2.7, while the per employee disposal rate was 11.4 (CalRecycle, 2015d; 2015e).

The project site consists of a vacant lot; therefore, it is not anticipated that the proposed project would result in a substantial amount of solid waste generated due to demolition. Some waste would be generated during construction of the project, which would be properly disposed. Impacts related to solid waste and landfill capacity would be ***less than significant***.

Mitigation: None required.

Cumulative Impacts

Operation of the proposed project, in combination with past, present, and reasonably foreseeable future projects in the vicinity, could result in a significant cumulative impact on utility systems and services.

The geographic scope of potential cumulative impacts on parks and recreation facilities includes the City of Belmont. All cumulative projects identified in the vicinity have the potential to increase demand on utility systems and services. Future projects could combine to create a demand for water, stormwater, sewer, and solid waste services that cannot be met under the City's existing systems and service contracts. As with the proposed project, other future project's would be required to verify that they could be served by existing utility systems, or else pay fees to contribute to any necessary upgrades. As discussed above, the project would result in an incremental increase in demand for utility services, and the City would be able to serve the project. Therefore, the project's contribution to such impacts would be considered incremental and less than considerable. The cumulative impact would be ***less than significant***.

References

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Silicon Valley Clean Water (SVCW), 2008. SBSA Announces $339 Million, 10-Year Capital Improvement Plan. Press Advisory dated May 9, 2008. Available at: http://www.svcw.org/capital-improvements/

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2.2.18 Mandatory Findings of Significance

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
18. MANDATORY FINDINGS OF SIGNIFICANCE — Would the project:				
a) Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐
c) Have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Discussion

As discussed in the above text, the project is anticipated to have only ***less-than-significant*** impacts in the areas discussed with the implementation of identified mitigation measures. Significant impacts to cultural resources, noise, and hazardous materials would be mitigated through implementation of mitigation measures described above, summarized in this section, and presented in full in Section 2.2.19, below.

a) **Less than Significant with Mitigation.** Construction activities have the potential to result in significant impacts to fugitive dust, criteria air pollutants, breeding birds, below-ground archeological resources, and human remains. Any adverse effect to CEQA-significant resources resulting from construction would be reduced to a ***less-than-significant*** level by implementation of **Mitigation Measures AIR-1**, **BIO-1**, **CUL-1**, and **CUL-2**.

b) **Less than Significant with Mitigation.** For all topics that are analyzed in this Initial Study, the proposed project would not have cumulatively considerable impacts, as discussed under each applicable environmental topic. **Mitigation Measures AIR-1**, **BIO-1**, **CUL-1**, and **CUL-2** would apply.

c) **Less than Significant.** Regarding adverse effects on human beings, during construction of the proposed project, activities have the potential to result in significant levels of fugitive dust. During operation, the project could expose hotel patrons to noise from U.S. Route 101. These adverse effects would be reduced to a ***less-than-significant*** level by implementation of **Mitigation Measures AIR-1** and **NOI-1**.

2.2.19 Mitigation Measures Identified in this Initial Study

Mitigation Measure AES-1: A Lighting Design Plan, that describes the location and types of fixtures as well as lighting intensity measured in foot-candles, shall be submitted to the City of Belmont Planning Department for review and approval. Low intensity and indirect sources of light shall be used, where feasible. Bright light sources shall not be permitted unless specifically approved. Lighting shall be limited to areas that would be in operation during nighttime hours and on-demand lighting systems shall be preferred. All lighting installations shall be designed and installed to be fully shielded (full cutoff) and to minimize glare and obtrusive light by limiting outdoor lighting that is misdirected, excessive, or unnecessary, except as in the exceptions below, and shall have maximum lamp wattage of 250 watts for commercial lighting, or 100 watts incandescent. Lighting that is exempt includes:

- Lighting in swimming pools and other water features.
- Exit signs and other illumination required by building codes.
- Lighting for stairs and ramps, as required by the building code.
- Signs that are regulated by the sign code.
- Holiday and temporary lighting (less than thirty days use in any 1 year).
- Low-voltage landscape lighting, but such lighting should be shielded in such a way as to eliminate glare and light trespass.

In addition, all buildings and structures shall use non-reflective materials and be painted with non-reflective paint.

Mitigation Measure AIR-1: The following BAAQMD Best Management Practices for fugitive dust control will be required for all construction activities within the project area. These measures will reduce fugitive dust emissions primarily during soil movement, grading and demolition activities, but also during vehicle and equipment movement on unpaved project sites:

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.

2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.

3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.

4. All vehicle speeds on unpaved roads shall be limited to 15 mph.

5. All streets, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.

6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne

toxics control measure Title 13, Section 2485 of CCR). Clear signage shall be provided for construction workers at all access points.

7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.

8. A publicly visible sign shall be posted with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.

Mitigation Measure BIO-1: To the extent practicable, construction activities including tree removal, utility relocation, and the start of new site construction shall be performed between September 1st and January 31st in order to avoid breeding and nesting season for birds. If these activities cannot be performed during this period, a preconstruction survey for nesting birds shall be conducted by a qualified biologist.

Surveys shall be performed during breeding bird season (February 1st – August 31st) no more than 7 days prior to construction activities listed above in order to locate any active passerine nests within 250 feet of the project site and any active raptor nests within 500 feet of the project site. Surveys shall be performed in accessible areas within 500 feet of the project site and include suitable habitat within line of sight as access is available.

If active nests are found on either the project site or within the 500-foot survey buffer surrounding the project site, no-work buffer zones shall be established around the nests. Buffer distances will consider physical and visual barriers between the active nest and project activities, existing noise sources and disturbance, as well as sensitivity of the bird species to disturbance. Modification of standard buffer distances, 250 feet for active passerine nests and 500 feet for active raptor nests, will be determined by a qualified biologist in coordination with CDFW. No construction shall occur within a buffer zone until young have fledged or the nest is otherwise abandoned as determined by the qualified biologist. If work during the nesting season stops for 7 days or more and then resumes, then nesting bird surveys shall be repeated, to ensure that no new birds have begun nesting in the area.

Mitigation Measure CUL-1: Unanticipated Discovery of Archaeological Resources. If prehistoric or historic-period archaeological resources are encountered, all construction activities within 100 feet would halt and the City of Belmont would be notified. Prehistoric archaeological materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil ("midden") containing heat-affected rocks, artifacts, or shellfish remains; and stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-period materials might include stone, concrete, or adobe footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse. A Secretary of the Interior-qualified archaeologist would inspect the findings within 24 hours of discovery. If it is determined that the project could damage a historical resource or a unique archaeological

resource (as defined pursuant to the CEQA *Guidelines*), mitigation would be implemented in accordance with PRC Section 21083.2 and Section 15126.4 of the CEQA *Guidelines*, with a preference for preservation in place. Consistent with Section 15126.4(b)(3), this may be accomplished through planning construction to avoid the resource; incorporating the resource within open space; capping and covering the resource; or deeding the site into a permanent conservation easement. If avoidance is not feasible, a qualified archaeologist would prepare and implement a detailed treatment plan in consultation with the City of Belmont. Treatment of unique archaeological resources would follow the applicable requirements of PRC Section 21083.2. Treatment for most resources would consist of (but would not be not limited to) sample excavation, artifact collection, site documentation, and historical research, with the aim to target the recovery of important scientific data contained in the portion(s) of the significant resource to be impacted by the project. The treatment plan would include provisions for analysis of data in a regional context, reporting of results within a timely manner, curation of artifacts and data at an approved facility, and dissemination of reports to local and state repositories, libraries, and interested professionals.

Mitigation Measure CUL-2: Unanticipated Discovery of Human Remains. In the event of discovery or recognition of any human remains during construction activities, such activities within 100 feet of the find would cease until the San Mateo County Coroner has been contacted to determine that no investigation of the cause of death is required. The Native American Heritage Commission (NAHC) would be contacted within 24 hours if it is determined that the remains are Native American. The NAHC would then identify the person or persons it believes to be the most likely descendant from the deceased Native American, who in turn would make recommendations to the City of Belmont for the appropriate means of treating the human remains and any grave goods.

Mitigation Measure NOI-1: The following mitigation measures shall be implemented into the final design of the hotel, to reduce interior noise levels at the upper floors of the proposed hotel facing U.S. 101:

- Windows with a sound transmission class (STC) rating of up to 36 shall be required in those upper floor rooms closest to the freeway that have glass/metal panel siding. Rooms that have stucco siding (e.g., 7/8-inch cement plaster) shall have a STC rating of 32.

- Air-conditioning systems shall be included in the design to provide a habitable environment, which would reduce the need for windows to be opened in the upper floor hotel rooms.

APPENDIX AQ

Air Quality Data

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Average Annual Daily Criteria Pollutant Emissions **Shoreway Rd Hotel**

Unmitigated Construction			tons		Unmitigated Construction			average lbs/day	
Year	ROG	Nox	PM10 exh	PM2.5 exh	Year	ROG	Nox	PM10 exh	PM2.5 exh
2016-2017	1.0459	8.4557	0.4043	0.3807	2016-2017	5.9	48.0	2.3	2.2

Construction Duration: 352 days

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Shoreway Road Hotel

San Mateo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	1.56	Acre	1.56	67,953.60	0
Hotel	169.00	Room	1.83	91,465.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	70
Climate Zone	5			**Operational Year**	2017
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	349	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Updated the CO2 lb/MWh factor per PG&E's Greenhouse Gas Emission Factor info sheet (April 2013)

Land Use - 169 room hotel and 169 space parking lot to be developed on the 3.39 acre project site

Construction Phase - General construction schedule: 3/15/16 to 3/1/17, with phases and durations based on input from applicant

Off-road Equipment - Manlift would be battery powered during architectural coating phase

Off-road Equipment - Equipment types, number, hours per day, and hp provided by applicant

Off-road Equipment - Equipment types, number, hours per day, and hp provided by applicant

Off-road Equipment - Equipment types, number, hours per day, and hp provided by applicant

Off-road Equipment - Equipment types, number, hours per day, and hp provided by applicant

Off-road Equipment - Equipment types, number, hours per day, and hp provided by applicant

Trips and VMT - Worker number and haul truck capacity and triplength based on applicant input

Grading - 1,370 cy soil exported and 6,189 cy soil imported

Architectural Coating - Interier area = 89,220 sf; Exterior area = 5,332 sf; VOC content 46.67 g/L as provided by applicant

Vehicle Trips - Adjusted trip rates to match ITE trip generation information

Vechicle Emission Factors - Using a motor vehicle and delivery fleet mix consistent with an executive type hotel, based on professional experience with this land use type.

Vechicle Emission Factors - Using a motor vehicle and delivery fleet mix consistent with an executive type hotel, based on professional experience with this land use type.

Vechicle Emission Factors - Using a motor vehicle and delivery fleet mix consistent with an executive type hotel, based on professional experience with this land use type.

Area Coating - Interier area = 89,220 sf; Exterior area = 5,332 sf; VOC content 46.67 g/L as provided by applicant

Energy Use - Updated Title 24 electricity and natural gas energy intensity to match 2013 Title 24 standards (25% reduction versus 2008 standards)

Construction Off-road Equipment Mitigation -

Area Mitigation - Low VOC Paints assumed per applicant input

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

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2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.9303	8.3215	5.3957	0.0104	0.0536	0.3984	0.4520	0.0140	0.3752	0.3892	0.0000	963.5973	963.5973	0.1923	0.0000	967.6348
2017	0.1156	0.1342	0.1006	2.1000e-004	4.3400e-003	5.9100e-003	0.0102	1.1500e-003	5.4500e-003	6.6000e-003	0.0000	18.2304	18.2304	4.5200e-003	0.0000	18.3253
Total	**1.0459**	**8.4557**	**5.4963**	**0.0106**	**0.0579**	**0.4043**	**0.4622**	**0.0151**	**0.3807**	**0.3958**	**0.0000**	**981.8277**	**981.8277**	**0.1968**	**0.0000**	**985.9601**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.9303	8.3215	5.3957	0.0104	0.0536	0.3984	0.4520	0.0140	0.3752	0.3892	0.0000	963.5963	963.5963	0.1923	0.0000	967.6338
2017	0.1156	0.1342	0.1006	2.1000e-004	4.3400e-003	5.9100e-003	0.0102	1.1500e-003	5.4500e-003	6.6000e-003	0.0000	18.2304	18.2304	4.5200e-003	0.0000	18.3253
Total	**1.0459**	**8.4557**	**5.4963**	**0.0106**	**0.0579**	**0.4043**	**0.4622**	**0.0151**	**0.3807**	**0.3958**	**0.0000**	**981.8266**	**981.8266**	**0.1968**	**0.0000**	**985.9591**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.6375	2.0000e-005	1.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.0500e-003	3.0500e-003	1.0000e-005	0.0000	3.2300e-003
Energy	0.0150	0.1359	0.1142	8.2000e-004		0.0103	0.0103		0.0103	0.0103	0.0000	279.5160	279.5160	0.0138	4.9700e-003	281.3472
Mobile	0.5407	0.6238	4.9908	0.0101	0.7959	7.3300e-003	0.8032	0.2119	6.7600e-003	0.2186	0.0000	762.2149	762.2149	0.0371	0.0000	762.9946
Waste						0.0000	0.0000		0.0000	0.0000	18.7828	0.0000	18.7828	1.1100	0.0000	42.0934
Water						0.0000	0.0000		0.0000	0.0000	1.3601	3.9361	5.2961	0.1400	3.3700e-003	9.2800
Total	**1.1931**	**0.7598**	**5.1066**	**0.0110**	**0.7959**	**0.0177**	**0.8136**	**0.2119**	**0.0171**	**0.2290**	**20.1428**	**1,045.6701**	**1,065.8129**	**1.3010**	**8.3400e-003**	**1,095.7184**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.6375	2.0000e-005	1.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.0500e-003	3.0500e-003	1.0000e-005	0.0000	3.2300e-003
Energy	0.0150	0.1359	0.1142	8.2000e-004		0.0103	0.0103		0.0103	0.0103	0.0000	279.5160	279.5160	0.0138	4.9700e-003	281.3472
Mobile	0.5407	0.6238	4.9908	0.0101	0.7959	7.3300e-003	0.8032	0.2119	6.7600e-003	0.2186	0.0000	762.2149	762.2149	0.0371	0.0000	762.9946
Waste						0.0000	0.0000		0.0000	0.0000	18.7828	0.0000	18.7828	1.1100	0.0000	42.0934
Water						0.0000	0.0000		0.0000	0.0000	1.3601	3.9361	5.2961	0.1400	3.3600e-003	9.2778
Total	**1.1931**	**0.7598**	**5.1066**	**0.0110**	**0.7959**	**0.0177**	**0.8136**	**0.2119**	**0.0171**	**0.2290**	**20.1428**	**1,045.6701**	**1,065.8129**	**1.3009**	**8.3300e-003**	**1,095.7162**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.12**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	3/15/2016	3/17/2016	7	3	
2	Grading	Grading	3/18/2016	4/15/2016	7	29	
3	Drainage/Utilities/Subgrade	Trenching	4/16/2016	5/14/2016	7	29	
4	Building Construction	Building Construction	5/15/2016	12/30/2016	7	230	
5	Architectural Coating	Architectural Coating	12/31/2016	2/8/2017	7	40	
6	Paving	Paving	2/9/2017	3/1/2017	7	21	

Acres of Grading (Site Preparation Phase): 4

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 89,220; Non-Residential Outdoor: 5,332 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Crawler Tractors	1	8.00	208	0.43
Site Preparation	Plate Compactors	1	8.00	13	0.43
Site Preparation	Rubber Tired Dozers	3	0.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	131	0.37
Grading	Air Compressors	1	8.00	50	0.48
Grading	Bore/Drill Rigs	1	8.00	475	0.50
Grading	Concrete/Industrial Saws	1	8.00	22	0.73
Grading	Cranes	1	8.00	945	0.29
Grading	Crawler Tractors	1	8.00	208	0.43
Grading	Excavators	1	0.00	162	0.38
Grading	Graders	1	8.00	275	0.41
Grading	Plate Compactors	1	8.00	13	0.43

Grading	Rollers	1	8.00	203	0.38
Grading	Rough Terrain Forklifts	1	8.00	130	0.40
Grading	Rubber Tired Dozers	1	0.00	255	0.40
Grading	Scrapers	1	8.00	407	0.48
Grading	Tractors/Loaders/Backhoes	1	8.00	107	0.37
Drainage/Utilities/Subgrade	Air Compressors	1	8.00	50	0.48
Drainage/Utilities/Subgrade	Bore/Drill Rigs	1	8.00	475	0.50
Drainage/Utilities/Subgrade	Cement and Mortar Mixers	1	8.00	350	0.56
Drainage/Utilities/Subgrade	Concrete/Industrial Saws	1	8.00	22	0.73
Drainage/Utilities/Subgrade	Cranes	1	8.00	945	0.29
Drainage/Utilities/Subgrade	Crawler Tractors	1	8.00	208	0.43
Drainage/Utilities/Subgrade	Excavators	1	8.00	159	0.38
Drainage/Utilities/Subgrade	Graders	1	8.00	275	0.41
Drainage/Utilities/Subgrade	Off-Highway Tractors	1	8.00	74	0.44
Drainage/Utilities/Subgrade	Plate Compactors	2	8.00	13	0.43
Drainage/Utilities/Subgrade	Sweepers/Scrubbers	1	8.00	425	0.46
Drainage/Utilities/Subgrade	Tractors/Loaders/Backhoes	2	8.00	107	0.37
Drainage/Utilities/Subgrade	Trenchers	1	8.00	175	0.50
Building Construction	Air Compressors	3	8.00	50	0.48
Building Construction	Cement and Mortar Mixers	4	8.00	350	0.56
Building Construction	Cranes	1	8.00	945	0.29
Building Construction	Crawler Tractors	1	8.00	208	0.43
Building Construction	Forklifts	1	8.00	174	0.20
Building Construction	Generator Sets	1	8.00	325	0.74
Building Construction	Off-Highway Tractors	1	8.00	74	0.44
Building Construction	Rough Terrain Forklifts	1	8.00	130	0.40
Building Construction	Skid Steer Loaders	1	8.00	106	0.37
Building Construction	Sweepers/Scrubbers	1	8.00	425	0.46

Building Construction	Tractors/Loaders/Backhoes	1	8.00	107	0.37
Building Construction	Trenchers	1	8.00	175	0.50
Building Construction	Welders	1	0.00	46	0.45
Architectural Coating	Aerial Lifts	1	0.00	78	0.48
Architectural Coating	Air Compressors	1	0.00	78	0.48
Paving	Cement and Mortar Mixers	2	0.00	9	0.56
Paving	Pavers	1	8.00	174	0.42
Paving	Paving Equipment	1	8.00	40	0.36
Paving	Plate Compactors	1	8.00	13	0.43
Paving	Rollers	1	8.00	203	0.38
Paving	Tractors/Loaders/Backhoes	1	0.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	6	6.00	0.00	68.00	12.40	7.30	15.00	LD_Mix	HDT_Mix	HHDT
Grading	13	6.00	0.00	310.00	12.40	7.30	15.00	LD_Mix	HDT_Mix	HHDT
Drainage/Utilities/Subgrade	15	12.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	21	24.00	26.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	2	16.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	16.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Clean Paved Roads

3.2 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.2000e-003	0.0000	2.2000e-003	2.4000e-004	0.0000	2.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.6600e-003	0.0205	8.9200e-003	2.0000e-005		8.6000e-004	8.6000e-004		7.9000e-004	7.9000e-004	0.0000	1.7500	1.7500	5.1000e-004	0.0000	1.7608
Total	**1.6600e-003**	**0.0205**	**8.9200e-003**	**2.0000e-005**	**2.2000e-003**	**8.6000e-004**	**3.0600e-003**	**2.4000e-004**	**7.9000e-004**	**1.0300e-003**	**0.0000**	**1.7500**	**1.7500**	**5.1000e-004**	**0.0000**	**1.7608**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.5000e-004	7.8700e-003	0.0108	2.0000e-005	4.3000e-004	9.0000e-005	5.2000e-004	1.2000e-004	9.0000e-005	2.0000e-004	0.0000	1.7041	1.7041	1.0000e-005	0.0000	1.7044
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	5.0000e-005	4.8000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0734	0.0734	0.0000	0.0000	0.0734
Total	**7.8000e-004**	**7.9200e-003**	**0.0113**	**2.0000e-005**	**5.1000e-004**	**9.0000e-005**	**6.0000e-004**	**1.4000e-004**	**9.0000e-005**	**2.2000e-004**	**0.0000**	**1.7774**	**1.7774**	**1.0000e-005**	**0.0000**	**1.7778**

3.2 Site Preparation - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.2000e-003	0.0000	2.2000e-003	2.4000e-004	0.0000	2.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.6600e-003	0.0205	8.9200e-003	2.0000e-005		8.6000e-004	8.6000e-004		7.9000e-004	7.9000e-004	0.0000	1.7500	1.7500	5.1000e-004	0.0000	1.7608
Total	**1.6600e-003**	**0.0205**	**8.9200e-003**	**2.0000e-005**	**2.2000e-003**	**8.6000e-004**	**3.0600e-003**	**2.4000e-004**	**7.9000e-004**	**1.0300e-003**	**0.0000**	**1.7500**	**1.7500**	**5.1000e-004**	**0.0000**	**1.7608**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.5000e-004	7.8700e-003	0.0108	2.0000e-005	4.3000e-004	9.0000e-005	5.2000e-004	1.2000e-004	9.0000e-005	2.0000e-004	0.0000	1.7041	1.7041	1.0000e-005	0.0000	1.7044
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	5.0000e-005	4.8000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0734	0.0734	0.0000	0.0000	0.0734
Total	**7.8000e-004**	**7.9200e-003**	**0.0113**	**2.0000e-005**	**5.1000e-004**	**9.0000e-005**	**6.0000e-004**	**1.4000e-004**	**9.0000e-005**	**2.2000e-004**	**0.0000**	**1.7774**	**1.7774**	**1.0000e-005**	**0.0000**	**1.7778**

3.3 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.4700e-003	0.0000	2.4700e-003	2.8000e-004	0.0000	2.8000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0812	0.9208	0.4979	1.0800e-003		0.0378	0.0378		0.0351	0.0351	0.0000	99.8886	99.8886	0.0295	0.0000	100.5071
Total	**0.0812**	**0.9208**	**0.4979**	**1.0800e-003**	**2.4700e-003**	**0.0378**	**0.0403**	**2.8000e-004**	**0.0351**	**0.0354**	**0.0000**	**99.8886**	**99.8886**	**0.0295**	**0.0000**	**100.5071**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.4300e-003	0.0359	0.0493	9.0000e-005	1.9400e-003	4.3000e-004	2.3700e-003	5.3000e-004	4.0000e-004	9.3000e-004	0.0000	7.7686	7.7686	6.0000e-005	0.0000	7.7698
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	4.8000e-004	4.6000e-003	1.0000e-005	7.9000e-004	1.0000e-005	7.9000e-004	2.1000e-004	1.0000e-005	2.2000e-004	0.0000	0.7091	0.7091	4.0000e-005	0.0000	0.7099
Total	**3.7400e-003**	**0.0364**	**0.0539**	**1.0000e-004**	**2.7300e-003**	**4.4000e-004**	**3.1600e-003**	**7.4000e-004**	**4.1000e-004**	**1.1500e-003**	**0.0000**	**8.4777**	**8.4777**	**1.0000e-004**	**0.0000**	**8.4798**

3.3 Grading - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.4700e-003	0.0000	2.4700e-003	2.8000e-004	0.0000	2.8000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0812	0.9208	0.4978	1.0800e-003		0.0378	0.0378		0.0351	0.0351	0.0000	99.8885	99.8885	0.0295	0.0000	100.5070
Total	**0.0812**	**0.9208**	**0.4978**	**1.0800e-003**	**2.4700e-003**	**0.0378**	**0.0403**	**2.8000e-004**	**0.0351**	**0.0354**	**0.0000**	**99.8885**	**99.8885**	**0.0295**	**0.0000**	**100.5070**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.4300e-003	0.0359	0.0493	9.0000e-005	1.9400e-003	4.3000e-004	2.3700e-003	5.3000e-004	4.0000e-004	9.3000e-004	0.0000	7.7686	7.7686	6.0000e-005	0.0000	7.7698
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	4.8000e-004	4.6000e-003	1.0000e-005	7.9000e-004	1.0000e-005	7.9000e-004	2.1000e-004	1.0000e-005	2.2000e-004	0.0000	0.7091	0.7091	4.0000e-005	0.0000	0.7099
Total	**3.7400e-003**	**0.0364**	**0.0539**	**1.0000e-004**	**2.7300e-003**	**4.4000e-004**	**3.1600e-003**	**7.4000e-004**	**4.1000e-004**	**1.1500e-003**	**0.0000**	**8.4777**	**8.4777**	**1.0000e-004**	**0.0000**	**8.4798**

3.4 Drainage/Utilities/Subgrade - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0799	0.8173	0.4534	9.6000e-004		0.0401	0.0401		0.0372	0.0372	0.0000	88.3215	88.3215	0.0258	0.0000	88.8636
Total	**0.0799**	**0.8173**	**0.4534**	**9.6000e-004**		**0.0401**	**0.0401**		**0.0372**	**0.0372**	**0.0000**	**88.3215**	**88.3215**	**0.0258**	**0.0000**	**88.8636**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.2000e-004	9.7000e-004	9.2100e-003	2.0000e-005	1.5700e-003	1.0000e-005	1.5900e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.4183	1.4183	8.0000e-005	0.0000	1.4199
Total	**6.2000e-004**	**9.7000e-004**	**9.2100e-003**	**2.0000e-005**	**1.5700e-003**	**1.0000e-005**	**1.5900e-003**	**4.2000e-004**	**1.0000e-005**	**4.3000e-004**	**0.0000**	**1.4183**	**1.4183**	**8.0000e-005**	**0.0000**	**1.4199**

3.4 Drainage/Utilities/Subgrade - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0799	0.8173	0.4534	9.6000e-004		0.0401	0.0401		0.0372	0.0372	0.0000	88.3214	88.3214	0.0258	0.0000	88.8635
Total	**0.0799**	**0.8173**	**0.4534**	**9.6000e-004**		**0.0401**	**0.0401**		**0.0372**	**0.0372**	**0.0000**	**88.3214**	**88.3214**	**0.0258**	**0.0000**	**88.8635**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.2000e-004	9.7000e-004	9.2100e-003	2.0000e-005	1.5700e-003	1.0000e-005	1.5900e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.4183	1.4183	8.0000e-005	0.0000	1.4199
Total	**6.2000e-004**	**9.7000e-004**	**9.2100e-003**	**2.0000e-005**	**1.5700e-003**	**1.0000e-005**	**1.5900e-003**	**4.2000e-004**	**1.0000e-005**	**4.3000e-004**	**0.0000**	**1.4183**	**1.4183**	**8.0000e-005**	**0.0000**	**1.4199**

3.5 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.7109	6.1992	3.6960	7.1700e-003		0.3145	0.3145		0.2975	0.2975	0.0000	676.1498	676.1498	0.1346	0.0000	678.9753
Total	**0.7109**	**6.1992**	**3.6960**	**7.1700e-003**		**0.3145**	**0.3145**		**0.2975**	**0.2975**	**0.0000**	**676.1498**	**676.1498**	**0.1346**	**0.0000**	**678.9753**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0391	0.3030	0.5187	7.0000e-004	0.0191	4.3300e-003	0.0234	5.4700e-003	3.9800e-003	9.4500e-003	0.0000	63.2524	63.2524	5.0000e-004	0.0000	63.2630
Worker	9.8700e-003	0.0154	0.1461	2.9000e-004	0.0249	2.0000e-004	0.0251	6.6400e-003	1.8000e-004	6.8200e-003	0.0000	22.4964	22.4964	1.2300e-003	0.0000	22.5223
Total	**0.0490**	**0.3184**	**0.6648**	**9.9000e-004**	**0.0440**	**4.5300e-003**	**0.0486**	**0.0121**	**4.1600e-003**	**0.0163**	**0.0000**	**85.7489**	**85.7489**	**1.7300e-003**	**0.0000**	**85.7853**

3.5 Building Construction - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.7109	6.1992	3.6960	7.1700e-003		0.3145	0.3145		0.2975	0.2975	0.0000	676.1490	676.1490	0.1346	0.0000	678.9745
Total	**0.7109**	**6.1992**	**3.6960**	**7.1700e-003**		**0.3145**	**0.3145**		**0.2975**	**0.2975**	**0.0000**	**676.1490**	**676.1490**	**0.1346**	**0.0000**	**678.9745**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0391	0.3030	0.5187	7.0000e-004	0.0191	4.3300e-003	0.0234	5.4700e-003	3.9800e-003	9.4500e-003	0.0000	63.2524	63.2524	5.0000e-004	0.0000	63.2630
Worker	9.8700e-003	0.0154	0.1461	2.9000e-004	0.0249	2.0000e-004	0.0251	6.6400e-003	1.8000e-004	6.8200e-003	0.0000	22.4964	22.4964	1.2300e-003	0.0000	22.5223
Total	**0.0490**	**0.3184**	**0.6648**	**9.9000e-004**	**0.0440**	**4.5300e-003**	**0.0486**	**0.0121**	**4.1600e-003**	**0.0163**	**0.0000**	**85.7489**	**85.7489**	**1.7300e-003**	**0.0000**	**85.7853**

3.6 Architectural Coating - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.5600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.5600e-003**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	4.0000e-005	4.2000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0652	0.0652	0.0000	0.0000	0.0653
Total	**3.0000e-005**	**4.0000e-005**	**4.2000e-004**	**0.0000**	**7.0000e-005**	**0.0000**	**7.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0652**	**0.0652**	**0.0000**	**0.0000**	**0.0653**

3.6 Architectural Coating - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.5600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.5600e-003**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	4.0000e-005	4.2000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0652	0.0652	0.0000	0.0000	0.0653
Total	**3.0000e-005**	**4.0000e-005**	**4.2000e-004**	**0.0000**	**7.0000e-005**	**0.0000**	**7.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0652**	**0.0652**	**0.0000**	**0.0000**	**0.0653**

3.6 Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0997					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0997**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.9000e-004	1.5600e-003	0.0147	3.0000e-005	2.8200e-003	2.0000e-005	2.8400e-003	7.5000e-004	2.0000e-005	7.7000e-004	0.0000	2.4489	2.4489	1.3000e-004	0.0000	2.4515
Total	**9.9000e-004**	**1.5600e-003**	**0.0147**	**3.0000e-005**	**2.8200e-003**	**2.0000e-005**	**2.8400e-003**	**7.5000e-004**	**2.0000e-005**	**7.7000e-004**	**0.0000**	**2.4489**	**2.4489**	**1.3000e-004**	**0.0000**	**2.4515**

3.6 Architectural Coating - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0997					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0997**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.9000e-004	1.5600e-003	0.0147	3.0000e-005	2.8200e-003	2.0000e-005	2.8400e-003	7.5000e-004	2.0000e-005	7.7000e-004	0.0000	2.4489	2.4489	1.3000e-004	0.0000	2.4515
Total	**9.9000e-004**	**1.5600e-003**	**0.0147**	**3.0000e-005**	**2.8200e-003**	**2.0000e-005**	**2.8400e-003**	**7.5000e-004**	**2.0000e-005**	**7.7000e-004**	**0.0000**	**2.4489**	**2.4489**	**1.3000e-004**	**0.0000**	**2.4515**

3.7 Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0123	0.1318	0.0780	1.6000e-004		5.8700e-003	5.8700e-003		5.4200e-003	5.4200e-003	0.0000	14.4629	14.4629	4.3200e-003	0.0000	14.5537
Paving	2.0400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0144**	**0.1318**	**0.0780**	**1.6000e-004**		**5.8700e-003**	**5.8700e-003**		**5.4200e-003**	**5.4200e-003**	**0.0000**	**14.4629**	**14.4629**	**4.3200e-003**	**0.0000**	**14.5537**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.3000e-004	8.4000e-004	7.9300e-003	2.0000e-005	1.5200e-003	1.0000e-005	1.5300e-003	4.0000e-004	1.0000e-005	4.1000e-004	0.0000	1.3186	1.3186	7.0000e-005	0.0000	1.3201
Total	**5.3000e-004**	**8.4000e-004**	**7.9300e-003**	**2.0000e-005**	**1.5200e-003**	**1.0000e-005**	**1.5300e-003**	**4.0000e-004**	**1.0000e-005**	**4.1000e-004**	**0.0000**	**1.3186**	**1.3186**	**7.0000e-005**	**0.0000**	**1.3201**

3.7 Paving - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0123	0.1318	0.0780	1.6000e-004		5.8700e-003	5.8700e-003		5.4200e-003	5.4200e-003	0.0000	14.4629	14.4629	4.3200e-003	0.0000	14.5537
Paving	2.0400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0144**	**0.1318**	**0.0780**	**1.6000e-004**		**5.8700e-003**	**5.8700e-003**		**5.4200e-003**	**5.4200e-003**	**0.0000**	**14.4629**	**14.4629**	**4.3200e-003**	**0.0000**	**14.5537**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.3000e-004	8.4000e-004	7.9300e-003	2.0000e-005	1.5200e-003	1.0000e-005	1.5300e-003	4.0000e-004	1.0000e-005	4.1000e-004	0.0000	1.3186	1.3186	7.0000e-005	0.0000	1.3201
Total	**5.3000e-004**	**8.4000e-004**	**7.9300e-003**	**2.0000e-005**	**1.5200e-003**	**1.0000e-005**	**1.5300e-003**	**4.0000e-004**	**1.0000e-005**	**4.1000e-004**	**0.0000**	**1.3186**	**1.3186**	**7.0000e-005**	**0.0000**	**1.3201**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.5407	0.6238	4.9908	0.0101	0.7959	7.3300e-003	0.8032	0.2119	6.7600e-003	0.2186	0.0000	762.2149	762.2149	0.0371	0.0000	762.9946
Unmitigated	0.5407	0.6238	4.9908	0.0101	0.7959	7.3300e-003	0.8032	0.2119	6.7600e-003	0.2186	0.0000	762.2149	762.2149	0.0371	0.0000	762.9946

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	1,140.75	1,331.72	1005.55	2,182,483	2,182,483
Parking Lot	0.00	0.00	0.00		
Total	1,140.75	1,331.72	1,005.55	2,182,483	2,182,483

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.603906	0.062714	0.176356	0.114004	0.029626	0.004163	0.000000	0.000000	0.002626	0.000000	0.006605	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	131.5265	131.5265	0.0109	2.2600e-003	132.4570
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	131.5265	131.5265	0.0109	2.2600e-003	132.4570
NaturalGas Mitigated	0.0150	0.1359	0.1142	8.2000e-004		0.0103	0.0103		0.0103	0.0103	0.0000	147.9895	147.9895	2.8400e-003	2.7100e-003	148.8902
NaturalGas Unmitigated	0.0150	0.1359	0.1142	8.2000e-004		0.0103	0.0103		0.0103	0.0103	0.0000	147.9895	147.9895	2.8400e-003	2.7100e-003	148.8902

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hotel	2.77322e+006	0.0150	0.1359	0.1142	8.2000e-004		0.0103	0.0103		0.0103	0.0103	0.0000	147.9895	147.9895	2.8400e-003	2.7100e-003	148.8902
Total		**0.0150**	**0.1359**	**0.1142**	**8.2000e-004**		**0.0103**	**0.0103**		**0.0103**	**0.0103**	**0.0000**	**147.9895**	**147.9895**	**2.8400e-003**	**2.7100e-003**	**148.8902**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Hotel	2.77322e+006	0.0150	0.1359	0.1142	8.2000e-004		0.0103	0.0103		0.0103	0.0103	0.0000	147.9895	147.9895	2.8400e-003	2.7100e-003	148.8902
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0150**	**0.1359**	**0.1142**	**8.2000e-004**		**0.0103**	**0.0103**		**0.0103**	**0.0103**	**0.0000**	**147.9895**	**147.9895**	**2.8400e-003**	**2.7100e-003**	**148.8902**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hotel	771050	122.0601	0.0101	2.1000e-003	122.9236
Parking Lot	59799.2	9.4664	7.9000e-004	1.6000e-004	9.5334
Total		**131.5265**	**0.0109**	**2.2600e-003**	**132.4570**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hotel	771050	122.0601	0.0101	2.1000e-003	122.9236
Parking Lot	59799.2	9.4664	7.9000e-004	1.6000e-004	9.5334
Total		**131.5265**	**0.0109**	**2.2600e-003**	**132.4570**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.6375	2.0000e-005	1.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.0500e-003	3.0500e-003	1.0000e-005	0.0000	3.2300e-003
Unmitigated	0.6375	2.0000e-005	1.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.0500e-003	3.0500e-003	1.0000e-005	0.0000	3.2300e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0147					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6226					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.5000e-004	2.0000e-005	1.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.0500e-003	3.0500e-003	1.0000e-005	0.0000	3.2300e-003
Total	**0.6375**	**2.0000e-005**	**1.6000e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**3.0500e-003**	**3.0500e-003**	**1.0000e-005**	**0.0000**	**3.2300e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0147					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6226					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.5000e-004	2.0000e-005	1.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.0500e-003	3.0500e-003	1.0000e-005	0.0000	3.2300e-003
Total	**0.6375**	**2.0000e-005**	**1.6000e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**3.0500e-003**	**3.0500e-003**	**1.0000e-005**	**0.0000**	**3.2300e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	5.2961	0.1400	3.3600e-003	9.2778
Unmitigated	5.2961	0.1400	3.3700e-003	9.2800

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hotel	4.28698 / 0.476332	5.2961	0.1400	3.3700e-003	9.2800
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**5.2961**	**0.1400**	**3.3700e-003**	**9.2800**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hotel	4.28698 / 0.476332	5.2961	0.1400	3.3600e-003	9.2778
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**5.2961**	**0.1400**	**3.3600e-003**	**9.2778**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	18.7828	1.1100	0.0000	42.0934
Unmitigated	18.7828	1.1100	0.0000	42.0934

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	92.53	18.7828	1.1100	0.0000	42.0934
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**18.7828**	**1.1100**	**0.0000**	**42.0934**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	92.53	18.7828	1.1100	0.0000	42.0934
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**18.7828**	**1.1100**	**0.0000**	**42.0934**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Shoreway Road Hotel

San Mateo County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	1.56	Acre	1.56	67,953.60	0
Hotel	169.00	Room	1.83	91,465.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	70
Climate Zone	5			**Operational Year**	2017
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	349	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Updated the CO2 lb/MWh factor per PG&E's Greenhouse Gas Emission Factor info sheet (April 2013)

Land Use - 169 room hotel and 169 space parking lot to be developed on the 3.39 acre project site

Construction Phase - General construction schedule: 3/15/16 to 3/1/17, with phases and durations based on input from applicant

Off-road Equipment - Manlift would be battery powered during architectural coating phase

Off-road Equipment - Equipment types, number, hours per day, and hp provided by applicant

Off-road Equipment - Equipment types, number, hours per day, and hp provided by applicant

Off-road Equipment - Equipment types, number, hours per day, and hp provided by applicant

Off-road Equipment - Equipment types, number, hours per day, and hp provided by applicant

Off-road Equipment - Equipment types, number, hours per day, and hp provided by applicant

Trips and VMT - Worker number and haul truck capacity and triplength based on applicant input

Grading - 1,370 cy soil exported and 6,189 cy soil imported

Architectural Coating - Interier area = 89,220 sf; Exterior area = 5,332 sf; VOC content 46.67 g/L as provided by applicant

Vehicle Trips - Adjusted trip rates to match ITE trip generation information

Vechicle Emission Factors - Using a motor vehicle and delivery fleet mix consistent with an executive type hotel, based on professional experience with this land use type.

Vechicle Emission Factors - Using a motor vehicle and delivery fleet mix consistent with an executive type hotel, based on professional experience with this land use type.

Vechicle Emission Factors - Using a motor vehicle and delivery fleet mix consistent with an executive type hotel, based on professional experience with this land use type.

Area Coating - Interier area = 89,220 sf; Exterior area = 5,332 sf; VOC content 46.67 g/L as provided by applicant

Energy Use - Updated Title 24 electricity and natural gas energy intensity to match 2013 Title 24 standards (25% reduction versus 2008 standards)

Construction Off-road Equipment Mitigation -

Area Mitigation - Low VOC Paints assumed per applicant input

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
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tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	46.67
tblAreaCoating	Area_EF_Nonresidential_Exterior	150	46.67
tblAreaCoating	Area_EF_Nonresidential_Interior	100	46.67
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2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	6.5725	65.9082	37.5239	0.0810	1.8166	2.7741	3.1725	0.2560	2.6228	2.7319	0.0000	8,242.1887	8,242.1887	2.2465	0.0000	8,289.3641
2017	5.1660	12.6246	8.2144	0.0169	0.1509	0.5604	0.7113	0.0400	0.5168	0.5569	0.0000	1,665.0842	1,665.0842	0.4611	0.0000	1,674.7667
Total	**11.7385**	**78.5329**	**45.7383**	**0.0979**	**1.9675**	**3.3345**	**3.8838**	**0.2960**	**3.1397**	**3.2888**	**0.0000**	**9,907.2729**	**9,907.2729**	**2.7075**	**0.0000**	**9,964.1308**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	6.5725	65.9082	37.5239	0.0810	1.8166	2.7741	3.1725	0.2560	2.6228	2.7319	0.0000	8,242.1887	8,242.1887	2.2465	0.0000	8,289.3641
2017	5.1660	12.6246	8.2144	0.0169	0.1509	0.5604	0.7113	0.0400	0.5168	0.5569	0.0000	1,665.0842	1,665.0842	0.4611	0.0000	1,674.7667
Total	**11.7385**	**78.5329**	**45.7383**	**0.0979**	**1.9675**	**3.3345**	**3.8838**	**0.2960**	**3.1397**	**3.2888**	**0.0000**	**9,907.2729**	**9,907.2729**	**2.7075**	**0.0000**	**9,964.1308**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.4939	1.7000e-004	0.0177	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0373	0.0373	1.0000e-004		0.0395
Energy	0.0819	0.7449	0.6257	4.4700e-003		0.0566	0.0566		0.0566	0.0566		893.8659	893.8659	0.0171	0.0164	899.3058
Mobile	3.5288	3.5777	30.8757	0.0682	5.2901	0.0468	5.3369	1.4038	0.0431	1.4468		5,646.6315	5,646.6315	0.2610		5,652.1125
Total	**7.1046**	**4.3227**	**31.5191**	**0.0726**	**5.2901**	**0.1034**	**5.3935**	**1.4038**	**0.0997**	**1.5035**		**6,540.5347**	**6,540.5347**	**0.2782**	**0.0164**	**6,551.4578**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.4939	1.7000e-004	0.0177	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0373	0.0373	1.0000e-004		0.0395
Energy	0.0819	0.7449	0.6257	4.4700e-003		0.0566	0.0566		0.0566	0.0566		893.8659	893.8659	0.0171	0.0164	899.3058
Mobile	3.5288	3.5777	30.8757	0.0682	5.2901	0.0468	5.3369	1.4038	0.0431	1.4468		5,646.6315	5,646.6315	0.2610		5,652.1125
Total	**7.1046**	**4.3227**	**31.5191**	**0.0726**	**5.2901**	**0.1034**	**5.3935**	**1.4038**	**0.0997**	**1.5035**		**6,540.5347**	**6,540.5347**	**0.2782**	**0.0164**	**6,551.4578**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	3/15/2016	3/17/2016	7	3	
2	Grading	Grading	3/18/2016	4/15/2016	7	29	
3	Drainage/Utilities/Subgrade	Trenching	4/16/2016	5/14/2016	7	29	
4	Building Construction	Building Construction	5/15/2016	12/30/2016	7	230	
5	Architectural Coating	Architectural Coating	12/31/2016	2/8/2017	7	40	
6	Paving	Paving	2/9/2017	3/1/2017	7	21	

Acres of Grading (Site Preparation Phase): 4

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 89,220; Non-Residential Outdoor: 5,332 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Crawler Tractors	1	8.00	208	0.43
Site Preparation	Plate Compactors	1	8.00	13	0.43
Site Preparation	Rubber Tired Dozers	3	0.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	131	0.37
Grading	Air Compressors	1	8.00	50	0.48

Grading	Bore/Drill Rigs	1	8.00	475	0.50
Grading	Concrete/Industrial Saws	1	8.00	22	0.73
Grading	Cranes	1	8.00	945	0.29
Grading	Crawler Tractors	1	8.00	208	0.43
Grading	Excavators	1	0.00	162	0.38
Grading	Graders	1	8.00	275	0.41
Grading	Plate Compactors	1	8.00	13	0.43
Grading	Rollers	1	8.00	203	0.38
Grading	Rough Terrain Forklifts	1	8.00	130	0.40
Grading	Rubber Tired Dozers	1	0.00	255	0.40
Grading	Scrapers	1	8.00	407	0.48
Grading	Tractors/Loaders/Backhoes	1	8.00	107	0.37
Drainage/Utilities/Subgrade	Air Compressors	1	8.00	50	0.48
Drainage/Utilities/Subgrade	Bore/Drill Rigs	1	8.00	475	0.50
Drainage/Utilities/Subgrade	Cement and Mortar Mixers	1	8.00	350	0.56
Drainage/Utilities/Subgrade	Concrete/Industrial Saws	1	8.00	22	0.73
Drainage/Utilities/Subgrade	Cranes	1	8.00	945	0.29
Drainage/Utilities/Subgrade	Crawler Tractors	1	8.00	208	0.43
Drainage/Utilities/Subgrade	Excavators	1	8.00	159	0.38
Drainage/Utilities/Subgrade	Graders	1	8.00	275	0.41
Drainage/Utilities/Subgrade	Off-Highway Tractors	1	8.00	74	0.44
Drainage/Utilities/Subgrade	Plate Compactors	2	8.00	13	0.43
Drainage/Utilities/Subgrade	Sweepers/Scrubbers	1	8.00	425	0.46
Drainage/Utilities/Subgrade	Tractors/Loaders/Backhoes	2	8.00	107	0.37
Drainage/Utilities/Subgrade	Trenchers	1	8.00	175	0.50
Building Construction	Air Compressors	3	8.00	50	0.48
Building Construction	Cement and Mortar Mixers	4	8.00	350	0.56
Building Construction	Cranes	1	8.00	945	0.29

Building Construction	Crawler Tractors	1	8.00	208	0.43
Building Construction	Forklifts	1	8.00	174	0.20
Building Construction	Generator Sets	1	8.00	325	0.74
Building Construction	Off-Highway Tractors	1	8.00	74	0.44
Building Construction	Rough Terrain Forklifts	1	8.00	130	0.40
Building Construction	Skid Steer Loaders	1	8.00	106	0.37
Building Construction	Sweepers/Scrubbers	1	8.00	425	0.46
Building Construction	Tractors/Loaders/Backhoes	1	8.00	107	0.37
Building Construction	Trenchers	1	8.00	175	0.50
Building Construction	Welders	1	0.00	46	0.45
Architectural Coating	Aerial Lifts	1	0.00	78	0.48
Architectural Coating	Air Compressors	1	0.00	78	0.48
Paving	Cement and Mortar Mixers	2	0.00	9	0.56
Paving	Pavers	1	8.00	174	0.42
Paving	Paving Equipment	1	8.00	40	0.36
Paving	Plate Compactors	1	8.00	13	0.43
Paving	Rollers	1	8.00	203	0.38
Paving	Tractors/Loaders/Backhoes	1	0.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	6	6.00	0.00	68.00	12.40	7.30	15.00	LD_Mix	HDT_Mix	HHDT
Grading	13	6.00	0.00	310.00	12.40	7.30	15.00	LD_Mix	HDT_Mix	HHDT
Drainage/Utilities/Subgrade	15	12.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	21	24.00	26.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	2	16.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	16.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Clean Paved Roads

3.2 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.4656	0.0000	1.4656	0.1605	0.0000	0.1605			0.0000			0.0000
Off-Road	1.1058	13.6918	5.9492	0.0126		0.5735	0.5735		0.5289	0.5289		1,286.0370	1,286.0370	0.3768		1,293.9505
Total	**1.1058**	**13.6918**	**5.9492**	**0.0126**	**1.4656**	**0.5735**	**2.0391**	**0.1605**	**0.5289**	**0.6894**		**1,286.0370**	**1,286.0370**	**0.3768**		**1,293.9505**

3.2 Site Preparation - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.4553	5.0417	6.0648	0.0125	0.2944	0.0631	0.3575	0.0805	0.0580	0.1385		1,253.9643	1,253.9643	9.3400e-003		1,254.1604
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0221	0.0294	0.3296	6.7000e-004	0.0566	4.4000e-004	0.0570	0.0150	4.0000e-004	0.0154		57.1400	57.1400	2.9500e-003		57.2019
Total	**0.4774**	**5.0711**	**6.3944**	**0.0132**	**0.3510**	**0.0635**	**0.4145**	**0.0955**	**0.0584**	**0.1539**		**1,311.1044**	**1,311.1044**	**0.0123**		**1,311.3624**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.4656	0.0000	1.4656	0.1605	0.0000	0.1605			0.0000			0.0000
Off-Road	1.1058	13.6918	5.9492	0.0126		0.5735	0.5735		0.5289	0.5289	0.0000	1,286.0370	1,286.0370	0.3768		1,293.9505
Total	**1.1058**	**13.6918**	**5.9492**	**0.0126**	**1.4656**	**0.5735**	**2.0391**	**0.1605**	**0.5289**	**0.6894**	**0.0000**	**1,286.0370**	**1,286.0370**	**0.3768**		**1,293.9505**

3.2 Site Preparation - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.4553	5.0417	6.0648	0.0125	0.2944	0.0631	0.3575	0.0805	0.0580	0.1385		1,253.9643	1,253.9643	9.3400e-003		1,254.1604
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0221	0.0294	0.3296	6.7000e-004	0.0566	4.4000e-004	0.0570	0.0150	4.0000e-004	0.0154		57.1400	57.1400	2.9500e-003		57.2019
Total	**0.4774**	**5.0711**	**6.3944**	**0.0132**	**0.3510**	**0.0635**	**0.4145**	**0.0955**	**0.0584**	**0.1539**		**1,311.1044**	**1,311.1044**	**0.0123**		**1,311.3624**

3.3 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1704	0.0000	0.1704	0.0195	0.0000	0.0195			0.0000			0.0000
Off-Road	5.6001	63.5012	34.3342	0.0745		2.6100	2.6100		2.4201	2.4201		7,593.6761	7,593.6761	2.2391		7,640.6971
Total	**5.6001**	**63.5012**	**34.3342**	**0.0745**	**0.1704**	**2.6100**	**2.7804**	**0.0195**	**2.4201**	**2.4396**		**7,593.6761**	**7,593.6761**	**2.2391**		**7,640.6971**

3.3 Grading - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2147	2.3777	2.8602	5.8900e-003	0.1388	0.0298	0.1686	0.0380	0.0274	0.0653		591.3726	591.3726	4.4000e-003		591.4651
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0221	0.0294	0.3296	6.7000e-004	0.0566	4.4000e-004	0.0570	0.0150	4.0000e-004	0.0154		57.1400	57.1400	2.9500e-003		57.2019
Total	**0.2368**	**2.4071**	**3.1897**	**6.5600e-003**	**0.1954**	**0.0302**	**0.2256**	**0.0530**	**0.0278**	**0.0807**		**648.5127**	**648.5127**	**7.3500e-003**		**648.6670**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1704	0.0000	0.1704	0.0195	0.0000	0.0195			0.0000			0.0000
Off-Road	5.6001	63.5012	34.3342	0.0745		2.6100	2.6100		2.4201	2.4201	0.0000	7,593.6761	7,593.6761	2.2391		7,640.6971
Total	**5.6001**	**63.5012**	**34.3342**	**0.0745**	**0.1704**	**2.6100**	**2.7804**	**0.0195**	**2.4201**	**2.4396**	**0.0000**	**7,593.6761**	**7,593.6761**	**2.2391**		**7,640.6971**

3.3 Grading - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2147	2.3777	2.8602	5.8900e-003	0.1388	0.0298	0.1686	0.0380	0.0274	0.0653		591.3726	591.3726	4.4000e-003		591.4651
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0221	0.0294	0.3296	6.7000e-004	0.0566	4.4000e-004	0.0570	0.0150	4.0000e-004	0.0154		57.1400	57.1400	2.9500e-003		57.2019
Total	**0.2368**	**2.4071**	**3.1897**	**6.5600e-003**	**0.1954**	**0.0302**	**0.2256**	**0.0530**	**0.0278**	**0.0807**		**648.5127**	**648.5127**	**7.3500e-003**		**648.6670**

3.4 Drainage/Utilities/Subgrade - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.5104	56.3673	31.2653	0.0662		2.7649	2.7649		2.5640	2.5640		6,714.3266	6,714.3266	1.9628		6,755.5448
Total	**5.5104**	**56.3673**	**31.2653**	**0.0662**		**2.7649**	**2.7649**		**2.5640**	**2.5640**		**6,714.3266**	**6,714.3266**	**1.9628**		**6,755.5448**

3.4 Drainage/Utilities/Subgrade - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0443	0.0587	0.6591	1.3500e-003	0.1132	8.7000e-004	0.1140	0.0300	8.0000e-004	0.0308		114.2801	114.2801	5.9000e-003		114.4039
Total	**0.0443**	**0.0587**	**0.6591**	**1.3500e-003**	**0.1132**	**8.7000e-004**	**0.1140**	**0.0300**	**8.0000e-004**	**0.0308**		**114.2801**	**114.2801**	**5.9000e-003**		**114.4039**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.5104	56.3673	31.2653	0.0662		2.7649	2.7649		2.5640	2.5640	0.0000	6,714.3266	6,714.3266	1.9628		6,755.5448
Total	**5.5104**	**56.3673**	**31.2653**	**0.0662**		**2.7649**	**2.7649**		**2.5640**	**2.5640**	**0.0000**	**6,714.3266**	**6,714.3266**	**1.9628**		**6,755.5448**

3.4 Drainage/Utilities/Subgrade - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0443	0.0587	0.6591	1.3500e-003	0.1132	8.7000e-004	0.1140	0.0300	8.0000e-004	0.0308		114.2801	114.2801	5.9000e-003		114.4039
Total	**0.0443**	**0.0587**	**0.6591**	**1.3500e-003**	**0.1132**	**8.7000e-004**	**0.1140**	**0.0300**	**8.0000e-004**	**0.0308**		**114.2801**	**114.2801**	**5.9000e-003**		**114.4039**

3.5 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	6.1813	53.9062	32.1391	0.0623		2.7350	2.7350		2.5868	2.5868		6,481.1090	6,481.1090	1.2897		6,508.1927
Total	**6.1813**	**53.9062**	**32.1391**	**0.0623**		**2.7350**	**2.7350**		**2.5868**	**2.5868**		**6,481.1090**	**6,481.1090**	**1.2897**		**6,508.1927**

3.5 Building Construction - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3026	2.5414	3.5967	6.0800e-003	0.1721	0.0374	0.2095	0.0491	0.0344	0.0835		608.2916	608.2916	4.7800e-003		608.3919
Worker	0.0886	0.1174	1.3182	2.6900e-003	0.2263	1.7500e-003	0.2281	0.0600	1.6000e-003	0.0616		228.5601	228.5601	0.0118		228.8078
Total	**0.3912**	**2.6588**	**4.9150**	**8.7700e-003**	**0.3984**	**0.0392**	**0.4376**	**0.1091**	**0.0360**	**0.1451**		**836.8517**	**836.8517**	**0.0166**		**837.1997**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	6.1813	53.9062	32.1391	0.0623		2.7350	2.7350		2.5868	2.5868	0.0000	6,481.1090	6,481.1090	1.2897		6,508.1927
Total	**6.1813**	**53.9062**	**32.1391**	**0.0623**		**2.7350**	**2.7350**		**2.5868**	**2.5868**	**0.0000**	**6,481.1090**	**6,481.1090**	**1.2897**		**6,508.1927**

3.5 Building Construction - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3026	2.5414	3.5967	6.0800e-003	0.1721	0.0374	0.2095	0.0491	0.0344	0.0835		608.2916	608.2916	4.7800e-003		608.3919
Worker	0.0886	0.1174	1.3182	2.6900e-003	0.2263	1.7500e-003	0.2281	0.0600	1.6000e-003	0.0616		228.5601	228.5601	0.0118		228.8078
Total	**0.3912**	**2.6588**	**4.9150**	**8.7700e-003**	**0.3984**	**0.0392**	**0.4376**	**0.1091**	**0.0360**	**0.1451**		**836.8517**	**836.8517**	**0.0166**		**837.1997**

3.6 Architectural Coating - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.1133					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**5.1133**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.6 Architectural Coating - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0590	0.0783	0.8788	1.8000e-003	0.1509	1.1700e-003	0.1521	0.0400	1.0700e-003	0.0411		152.3734	152.3734	7.8600e-003		152.5385
Total	**0.0590**	**0.0783**	**0.8788**	**1.8000e-003**	**0.1509**	**1.1700e-003**	**0.1521**	**0.0400**	**1.0700e-003**	**0.0411**		**152.3734**	**152.3734**	**7.8600e-003**		**152.5385**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.1133					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**5.1133**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.6 Architectural Coating - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0590	0.0783	0.8788	1.8000e-003	0.1509	1.1700e-003	0.1521	0.0400	1.0700e-003	0.0411		152.3734	152.3734	7.8600e-003		152.5385
Total	**0.0590**	**0.0783**	**0.8788**	**1.8000e-003**	**0.1509**	**1.1700e-003**	**0.1521**	**0.0400**	**1.0700e-003**	**0.0411**		**152.3734**	**152.3734**	**7.8600e-003**		**152.5385**

3.6 Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.1133					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**5.1133**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.6 Architectural Coating - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0527	0.0703	0.7883	1.7900e-003	0.1509	1.1100e-003	0.1520	0.0400	1.0200e-003	0.0410		146.7368	146.7368	7.2000e-003		146.8880
Total	**0.0527**	**0.0703**	**0.7883**	**1.7900e-003**	**0.1509**	**1.1100e-003**	**0.1520**	**0.0400**	**1.0200e-003**	**0.0410**		**146.7368**	**146.7368**	**7.2000e-003**		**146.8880**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.1133					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**5.1133**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.6 Architectural Coating - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0527	0.0703	0.7883	1.7900e-003	0.1509	1.1100e-003	0.1520	0.0400	1.0200e-003	0.0410		146.7368	146.7368	7.2000e-003		146.8880
Total	**0.0527**	**0.0703**	**0.7883**	**1.7900e-003**	**0.1509**	**1.1100e-003**	**0.1520**	**0.0400**	**1.0200e-003**	**0.0410**		**146.7368**	**146.7368**	**7.2000e-003**		**146.8880**

3.7 Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1747	12.5544	7.4261	0.0151		0.5593	0.5593		0.5158	0.5158		1,518.3474	1,518.3474	0.4539		1,527.8787
Paving	0.1946					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3694**	**12.5544**	**7.4261**	**0.0151**		**0.5593**	**0.5593**		**0.5158**	**0.5158**		**1,518.3474**	**1,518.3474**	**0.4539**		**1,527.8787**

3.7 Paving - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0527	0.0703	0.7883	1.7900e-003	0.1509	1.1100e-003	0.1520	0.0400	1.0200e-003	0.0410		146.7368	146.7368	7.2000e-003		146.8880
Total	**0.0527**	**0.0703**	**0.7883**	**1.7900e-003**	**0.1509**	**1.1100e-003**	**0.1520**	**0.0400**	**1.0200e-003**	**0.0410**		**146.7368**	**146.7368**	**7.2000e-003**		**146.8880**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1747	12.5544	7.4261	0.0151		0.5593	0.5593		0.5158	0.5158	0.0000	1,518.3474	1,518.3474	0.4539		1,527.8787
Paving	0.1946					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3694**	**12.5544**	**7.4261**	**0.0151**		**0.5593**	**0.5593**		**0.5158**	**0.5158**	**0.0000**	**1,518.3474**	**1,518.3474**	**0.4539**		**1,527.8787**

3.7 Paving - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0527	0.0703	0.7883	1.7900e-003	0.1509	1.1100e-003	0.1520	0.0400	1.0200e-003	0.0410		146.7368	146.7368	7.2000e-003		146.8880
Total	**0.0527**	**0.0703**	**0.7883**	**1.7900e-003**	**0.1509**	**1.1100e-003**	**0.1520**	**0.0400**	**1.0200e-003**	**0.0410**		**146.7368**	**146.7368**	**7.2000e-003**		**146.8880**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.5288	3.5777	30.8757	0.0682	5.2901	0.0468	5.3369	1.4038	0.0431	1.4468		5,646.6315	5,646.6315	0.2610		5,652.1125
Unmitigated	3.5288	3.5777	30.8757	0.0682	5.2901	0.0468	5.3369	1.4038	0.0431	1.4468		5,646.6315	5,646.6315	0.2610		5,652.1125

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	1,140.75	1,331.72	1005.55	2,182,483	2,182,483
Parking Lot	0.00	0.00	0.00		
Total	1,140.75	1,331.72	1,005.55	2,182,483	2,182,483

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.603906	0.062714	0.176356	0.114004	0.029626	0.004163	0.000000	0.000000	0.002626	0.000000	0.006605	0.000000	0.000000

4.4 Fleet Mix

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0819	0.7449	0.6257	4.4700e-003		0.0566	0.0566		0.0566	0.0566		893.8659	893.8659	0.0171	0.0164	899.3058
NaturalGas Unmitigated	0.0819	0.7449	0.6257	4.4700e-003		0.0566	0.0566		0.0566	0.0566		893.8659	893.8659	0.0171	0.0164	899.3058

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Hotel	7597.86	0.0819	0.7449	0.6257	4.4700e-003		0.0566	0.0566		0.0566	0.0566		893.8659	893.8659	0.0171	0.0164	899.3058
Total		**0.0819**	**0.7449**	**0.6257**	**4.4700e-003**		**0.0566**	**0.0566**		**0.0566**	**0.0566**		**893.8659**	**893.8659**	**0.0171**	**0.0164**	**899.3058**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Hotel	7.59786	0.0819	0.7449	0.6257	4.4700e-003		0.0566	0.0566		0.0566	0.0566		893.8659	893.8659	0.0171	0.0164	899.3058
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0819**	**0.7449**	**0.6257**	**4.4700e-003**		**0.0566**	**0.0566**		**0.0566**	**0.0566**		**893.8659**	**893.8659**	**0.0171**	**0.0164**	**899.3058**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.4939	1.7000e-004	0.0177	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0373	0.0373	1.0000e-004		0.0395
Unmitigated	3.4939	1.7000e-004	0.0177	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0373	0.0373	1.0000e-004		0.0395

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0806					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.4116					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.7100e-003	1.7000e-004	0.0177	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0373	0.0373	1.0000e-004		0.0395
Total	**3.4939**	**1.7000e-004**	**0.0177**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**		**0.0373**	**0.0373**	**1.0000e-004**		**0.0395**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0806					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.4116					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.7100e-003	1.7000e-004	0.0177	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0373	0.0373	1.0000e-004		0.0395
Total	**3.4939**	**1.7000e-004**	**0.0177**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**		**0.0373**	**0.0373**	**1.0000e-004**		**0.0395**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Shoreway Road Hotel

San Mateo County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	1.56	Acre	1.56	67,953.60	0
Hotel	169.00	Room	1.83	91,465.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	70
Climate Zone	5			**Operational Year**	2017
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	349	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Updated the CO2 lb/MWh factor per PG&E's Greenhouse Gas Emission Factor info sheet (April 2013)

Land Use - 169 room hotel and 169 space parking lot to be developed on the 3.39 acre project site

Construction Phase - General construction schedule: 3/15/16 to 3/1/17, with phases and durations based on input from applicant

Off-road Equipment - Manlift would be battery powered during architectural coating phase

Off-road Equipment - Equipment types, number, hours per day, and hp provided by applicant

Off-road Equipment - Equipment types, number, hours per day, and hp provided by applicant

Off-road Equipment - Equipment types, number, hours per day, and hp provided by applicant

Off-road Equipment - Equipment types, number, hours per day, and hp provided by applicant

Off-road Equipment - Equipment types, number, hours per day, and hp provided by applicant

Trips and VMT - Worker number and haul truck capacity and triplength based on applicant input

Grading - 1,370 cy soil exported and 6,189 cy soil imported

Architectural Coating - Interier area = 89,220 sf; Exterior area = 5,332 sf; VOC content 46.67 g/L as provided by applicant

Vehicle Trips - Adjusted trip rates to match ITE trip generation information

Vechicle Emission Factors - Using a motor vehicle and delivery fleet mix consistent with an executive type hotel, based on professional experience with this land use type.

Vechicle Emission Factors - Using a motor vehicle and delivery fleet mix consistent with an executive type hotel, based on professional experience with this land use type.

Vechicle Emission Factors - Using a motor vehicle and delivery fleet mix consistent with an executive type hotel, based on professional experience with this land use type.

Area Coating - Interier area = 89,220 sf; Exterior area = 5,332 sf; VOC content 46.67 g/L as provided by applicant

Energy Use - Updated Title 24 electricity and natural gas energy intensity to match 2013 Title 24 standards (25% reduction versus 2008 standards)

Construction Off-road Equipment Mitigation -

Area Mitigation - Low VOC Paints assumed per applicant input

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	46,752.00	5,332.00

tblArchitecturalCoating	ConstArea_Nonresidential_Interior	140,255.00	89,220.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	46.67
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	46.67
tblAreaCoating	Area_EF_Nonresidential_Exterior	150	46.67
tblAreaCoating	Area_EF_Nonresidential_Interior	100	46.67
tblAreaCoating	Area_Nonresidential_Interior	140255	89220
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	100	46.67
tblConstructionPhase	NumDays	18.00	40.00
tblConstructionPhase	NumDays	8.00	29.00
tblConstructionPhase	NumDays	18.00	21.00
tblConstructionPhase	NumDays	5.00	3.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblEnergyUse	T24E	2.67	2.00
tblEnergyUse	T24NG	30.92	23.19
tblGrading	AcresOfGrading	58.00	4.00
tblGrading	AcresOfGrading	1.50	4.00
tblGrading	MaterialExported	0.00	1,370.00
tblGrading	MaterialImported	0.00	6,189.00
tblLandUse	LandUseSquareFeet	245,388.00	91,465.00
tblLandUse	LotAcreage	5.63	1.83
tblOffRoadEquipment	HorsePower	226.00	945.00
tblOffRoadEquipment	HorsePower	89.00	174.00
tblOffRoadEquipment	HorsePower	84.00	325.00

tblOffRoadEquipment	HorsePower	174.00	275.00
tblOffRoadEquipment	HorsePower	125.00	174.00
tblOffRoadEquipment	HorsePower	130.00	40.00
tblOffRoadEquipment	HorsePower	80.00	203.00
tblOffRoadEquipment	HorsePower	97.00	107.00
tblOffRoadEquipment	HorsePower	97.00	107.00
tblOffRoadEquipment	HorsePower	97.00	131.00
tblOffRoadEquipment	HorsePower	62.00	78.00
tblOffRoadEquipment	HorsePower	78.00	50.00
tblOffRoadEquipment	HorsePower	78.00	50.00
tblOffRoadEquipment	HorsePower	78.00	50.00
tblOffRoadEquipment	HorsePower	205.00	475.00
tblOffRoadEquipment	HorsePower	205.00	475.00
tblOffRoadEquipment	HorsePower	9.00	350.00
tblOffRoadEquipment	HorsePower	9.00	350.00
tblOffRoadEquipment	HorsePower	81.00	22.00
tblOffRoadEquipment	HorsePower	81.00	22.00
tblOffRoadEquipment	HorsePower	226.00	945.00
tblOffRoadEquipment	HorsePower	226.00	945.00
tblOffRoadEquipment	HorsePower	162.00	159.00
tblOffRoadEquipment	HorsePower	174.00	275.00
tblOffRoadEquipment	HorsePower	122.00	74.00
tblOffRoadEquipment	HorsePower	122.00	74.00
tblOffRoadEquipment	HorsePower	8.00	13.00
tblOffRoadEquipment	HorsePower	8.00	13.00
tblOffRoadEquipment	HorsePower	8.00	13.00
tblOffRoadEquipment	HorsePower	8.00	13.00
tblOffRoadEquipment	HorsePower	80.00	203.00

tblOffRoadEquipment	HorsePower	100.00	130.00
tblOffRoadEquipment	HorsePower	100.00	130.00
tblOffRoadEquipment	HorsePower	361.00	407.00
tblOffRoadEquipment	HorsePower	64.00	106.00
tblOffRoadEquipment	HorsePower	64.00	425.00
tblOffRoadEquipment	HorsePower	64.00	425.00
tblOffRoadEquipment	HorsePower	97.00	107.00
tblOffRoadEquipment	HorsePower	80.00	175.00
tblOffRoadEquipment	HorsePower	80.00	175.00
tblOffRoadEquipment	LoadFactor	0.31	0.48
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	PhaseName		Building Construction

tblOffRoadEquipment	PhaseName		Site Preparation
tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	PhaseName		Site Preparation
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tblOffRoadEquipment	PhaseName		Building Construction
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tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	349
tblProjectCharacteristics	OperationalYear	2014	2017
tblTripsAndVMT	HaulingTripLength	20.00	15.00
tblTripsAndVMT	HaulingTripLength	20.00	15.00
tblTripsAndVMT	HaulingTripNumber	171.00	68.00
tblTripsAndVMT	HaulingTripNumber	774.00	310.00
tblTripsAndVMT	WorkerTripNumber	15.00	6.00
tblTripsAndVMT	WorkerTripNumber	33.00	6.00
tblTripsAndVMT	WorkerTripNumber	38.00	12.00

tblTripsAndVMT	WorkerTripNumber	67.00	24.00
tblTripsAndVMT	WorkerTripNumber	13.00	16.00
tblTripsAndVMT	WorkerTripNumber	18.00	16.00
tblVehicleEF	HHD	4.0860e-003	0.00
tblVehicleEF	HHD	4.0860e-003	0.00
tblVehicleEF	HHD	4.0860e-003	0.00
tblVehicleEF	LDA	0.58	0.60
tblVehicleEF	LDA	0.58	0.60
tblVehicleEF	LDA	0.58	0.60
tblVehicleEF	MH	9.8300e-004	0.00
tblVehicleEF	MH	9.8300e-004	0.00
tblVehicleEF	MH	9.8300e-004	0.00
tblVehicleEF	MHD	0.02	0.00
tblVehicleEF	MHD	0.02	0.00
tblVehicleEF	MHD	0.02	0.00
tblVehicleEF	SBUS	2.2900e-004	0.00
tblVehicleEF	SBUS	2.2900e-004	0.00
tblVehicleEF	SBUS	2.2900e-004	0.00
tblVehicleEF	UBUS	3.6920e-003	0.00
tblVehicleEF	UBUS	3.6920e-003	0.00
tblVehicleEF	UBUS	3.6920e-003	0.00
tblVehicleTrips	ST_TR	8.19	7.88
tblVehicleTrips	WD_TR	8.17	6.75

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	6.6505	66.0546	38.7545	0.0810	1.8166	2.7745	3.1729	0.2560	2.6232	2.7323	0.0000	8,236.8697	8,236.8697	2.2465	0.0000	8,284.0467
2017	5.1680	12.6413	8.2108	0.0168	0.1509	0.5604	0.7113	0.0400	0.5168	0.5569	0.0000	1,656.2674	1,656.2674	0.4611	0.0000	1,665.9499
Total	**11.8186**	**78.6959**	**46.9653**	**0.0977**	**1.9675**	**3.3349**	**3.8842**	**0.2960**	**3.1400**	**3.2892**	**0.0000**	**9,893.1372**	**9,893.1372**	**2.7076**	**0.0000**	**9,949.9966**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	6.6505	66.0546	38.7545	0.0810	1.8166	2.7745	3.1729	0.2560	2.6232	2.7323	0.0000	8,236.8697	8,236.8697	2.2465	0.0000	8,284.0467
2017	5.1680	12.6413	8.2108	0.0168	0.1509	0.5604	0.7113	0.0400	0.5168	0.5569	0.0000	1,656.2674	1,656.2674	0.4611	0.0000	1,665.9499
Total	**11.8186**	**78.6959**	**46.9653**	**0.0977**	**1.9675**	**3.3349**	**3.8842**	**0.2960**	**3.1400**	**3.2892**	**0.0000**	**9,893.1372**	**9,893.1372**	**2.7076**	**0.0000**	**9,949.9966**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.4939	1.7000e-004	0.0177	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0373	0.0373	1.0000e-004		0.0395
Energy	0.0819	0.7449	0.6257	4.4700e-003		0.0566	0.0566		0.0566	0.0566		893.8659	893.8659	0.0171	0.0164	899.3058
Mobile	3.7131	4.2473	34.0935	0.0645	5.2901	0.0468	5.3369	1.4038	0.0431	1.4469		5,340.2441	5,340.2441	0.2610		5,345.7255
Total	**7.2889**	**4.9924**	**34.7370**	**0.0689**	**5.2901**	**0.1035**	**5.3936**	**1.4038**	**0.0998**	**1.5035**		**6,234.1473**	**6,234.1473**	**0.2783**	**0.0164**	**6,245.0708**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.4939	1.7000e-004	0.0177	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0373	0.0373	1.0000e-004		0.0395
Energy	0.0819	0.7449	0.6257	4.4700e-003		0.0566	0.0566		0.0566	0.0566		893.8659	893.8659	0.0171	0.0164	899.3058
Mobile	3.7131	4.2473	34.0935	0.0645	5.2901	0.0468	5.3369	1.4038	0.0431	1.4469		5,340.2441	5,340.2441	0.2610		5,345.7255
Total	**7.2889**	**4.9924**	**34.7370**	**0.0689**	**5.2901**	**0.1035**	**5.3936**	**1.4038**	**0.0998**	**1.5035**		**6,234.1473**	**6,234.1473**	**0.2783**	**0.0164**	**6,245.0708**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	3/15/2016	3/17/2016	7	3	
2	Grading	Grading	3/18/2016	4/15/2016	7	29	
3	Drainage/Utilities/Subgrade	Trenching	4/16/2016	5/14/2016	7	29	
4	Building Construction	Building Construction	5/15/2016	12/30/2016	7	230	
5	Architectural Coating	Architectural Coating	12/31/2016	2/8/2017	7	40	
6	Paving	Paving	2/9/2017	3/1/2017	7	21	

Acres of Grading (Site Preparation Phase): 4

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 89,220; Non-Residential Outdoor: 5,332 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Crawler Tractors	1	8.00	208	0.43
Site Preparation	Plate Compactors	1	8.00	13	0.43
Site Preparation	Rubber Tired Dozers	3	0.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	131	0.37
Grading	Air Compressors	1	8.00	50	0.48

Grading	Bore/Drill Rigs	1	8.00	475	0.50
Grading	Concrete/Industrial Saws	1	8.00	22	0.73
Grading	Cranes	1	8.00	945	0.29
Grading	Crawler Tractors	1	8.00	208	0.43
Grading	Excavators	1	0.00	162	0.38
Grading	Graders	1	8.00	275	0.41
Grading	Plate Compactors	1	8.00	13	0.43
Grading	Rollers	1	8.00	203	0.38
Grading	Rough Terrain Forklifts	1	8.00	130	0.40
Grading	Rubber Tired Dozers	1	0.00	255	0.40
Grading	Scrapers	1	8.00	407	0.48
Grading	Tractors/Loaders/Backhoes	1	8.00	107	0.37
Drainage/Utilities/Subgrade	Air Compressors	1	8.00	50	0.48
Drainage/Utilities/Subgrade	Bore/Drill Rigs	1	8.00	475	0.50
Drainage/Utilities/Subgrade	Cement and Mortar Mixers	1	8.00	350	0.56
Drainage/Utilities/Subgrade	Concrete/Industrial Saws	1	8.00	22	0.73
Drainage/Utilities/Subgrade	Cranes	1	8.00	945	0.29
Drainage/Utilities/Subgrade	Crawler Tractors	1	8.00	208	0.43
Drainage/Utilities/Subgrade	Excavators	1	8.00	159	0.38
Drainage/Utilities/Subgrade	Graders	1	8.00	275	0.41
Drainage/Utilities/Subgrade	Off-Highway Tractors	1	8.00	74	0.44
Drainage/Utilities/Subgrade	Plate Compactors	2	8.00	13	0.43
Drainage/Utilities/Subgrade	Sweepers/Scrubbers	1	8.00	425	0.46
Drainage/Utilities/Subgrade	Tractors/Loaders/Backhoes	2	8.00	107	0.37
Drainage/Utilities/Subgrade	Trenchers	1	8.00	175	0.50
Building Construction	Air Compressors	3	8.00	50	0.48
Building Construction	Cement and Mortar Mixers	4	8.00	350	0.56
Building Construction	Cranes	1	8.00	945	0.29

Building Construction	Crawler Tractors	1	8.00	208	0.43
Building Construction	Forklifts	1	8.00	174	0.20
Building Construction	Generator Sets	1	8.00	325	0.74
Building Construction	Off-Highway Tractors	1	8.00	74	0.44
Building Construction	Rough Terrain Forklifts	1	8.00	130	0.40
Building Construction	Skid Steer Loaders	1	8.00	106	0.37
Building Construction	Sweepers/Scrubbers	1	8.00	425	0.46
Building Construction	Tractors/Loaders/Backhoes	1	8.00	107	0.37
Building Construction	Trenchers	1	8.00	175	0.50
Building Construction	Welders	1	0.00	46	0.45
Architectural Coating	Aerial Lifts	1	0.00	78	0.48
Architectural Coating	Air Compressors	1	0.00	78	0.48
Paving	Cement and Mortar Mixers	2	0.00	9	0.56
Paving	Pavers	1	8.00	174	0.42
Paving	Paving Equipment	1	8.00	40	0.36
Paving	Plate Compactors	1	8.00	13	0.43
Paving	Rollers	1	8.00	203	0.38
Paving	Tractors/Loaders/Backhoes	1	0.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	6	6.00	0.00	68.00	12.40	7.30	15.00	LD_Mix	HDT_Mix	HHDT
Grading	13	6.00	0.00	310.00	12.40	7.30	15.00	LD_Mix	HDT_Mix	HHDT
Drainage/Utilities/Subgrade	15	12.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	21	24.00	26.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	2	16.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	16.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Clean Paved Roads

3.2 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.4656	0.0000	1.4656	0.1605	0.0000	0.1605			0.0000			0.0000
Off-Road	1.1058	13.6918	5.9492	0.0126		0.5735	0.5735		0.5289	0.5289		1,286.0370	1,286.0370	0.3768		1,293.9505
Total	**1.1058**	**13.6918**	**5.9492**	**0.0126**	**1.4656**	**0.5735**	**2.0391**	**0.1605**	**0.5289**	**0.6894**		**1,286.0370**	**1,286.0370**	**0.3768**		**1,293.9505**

3.2 Site Preparation - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.5453	5.3375	8.1854	0.0125	0.2944	0.0633	0.3577	0.0805	0.0582	0.1387		1,249.9582	1,249.9582	9.5000e-003		1,250.1576
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0232	0.0363	0.3309	6.3000e-004	0.0566	4.4000e-004	0.0570	0.0150	4.0000e-004	0.0154		53.7103	53.7103	2.9500e-003		53.7723
Total	**0.5685**	**5.3737**	**8.5163**	**0.0131**	**0.3510**	**0.0638**	**0.4147**	**0.0955**	**0.0586**	**0.1541**		**1,303.6686**	**1,303.6686**	**0.0125**		**1,303.9299**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.4656	0.0000	1.4656	0.1605	0.0000	0.1605			0.0000			0.0000
Off-Road	1.1058	13.6918	5.9492	0.0126		0.5735	0.5735		0.5289	0.5289	0.0000	1,286.0370	1,286.0370	0.3768		1,293.9505
Total	**1.1058**	**13.6918**	**5.9492**	**0.0126**	**1.4656**	**0.5735**	**2.0391**	**0.1605**	**0.5289**	**0.6894**	**0.0000**	**1,286.0370**	**1,286.0370**	**0.3768**		**1,293.9505**

3.2 Site Preparation - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.5453	5.3375	8.1854	0.0125	0.2944	0.0633	0.3577	0.0805	0.0582	0.1387		1,249.9582	1,249.9582	9.5000e-003		1,250.1576
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0232	0.0363	0.3309	6.3000e-004	0.0566	4.4000e-004	0.0570	0.0150	4.0000e-004	0.0154		53.7103	53.7103	2.9500e-003		53.7723
Total	**0.5685**	**5.3737**	**8.5163**	**0.0131**	**0.3510**	**0.0638**	**0.4147**	**0.0955**	**0.0586**	**0.1541**		**1,303.6686**	**1,303.6686**	**0.0125**		**1,303.9299**

3.3 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1704	0.0000	0.1704	0.0195	0.0000	0.0195			0.0000			0.0000
Off-Road	5.6001	63.5012	34.3342	0.0745		2.6100	2.6100		2.4201	2.4201		7,593.6761	7,593.6761	2.2391		7,640.6971
Total	**5.6001**	**63.5012**	**34.3342**	**0.0745**	**0.1704**	**2.6100**	**2.7804**	**0.0195**	**2.4201**	**2.4396**		**7,593.6761**	**7,593.6761**	**2.2391**		**7,640.6971**

3.3 Grading - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2572	2.5172	3.8603	5.8900e-003	0.1388	0.0299	0.1687	0.0380	0.0275	0.0654		589.4833	589.4833	4.4800e-003		589.5774
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0232	0.0363	0.3309	6.3000e-004	0.0566	4.4000e-004	0.0570	0.0150	4.0000e-004	0.0154		53.7103	53.7103	2.9500e-003		53.7723
Total	**0.2803**	**2.5534**	**4.1911**	**6.5200e-003**	**0.1954**	**0.0303**	**0.2257**	**0.0530**	**0.0279**	**0.0808**		**643.1937**	**643.1937**	**7.4300e-003**		**643.3496**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1704	0.0000	0.1704	0.0195	0.0000	0.0195			0.0000			0.0000
Off-Road	5.6001	63.5012	34.3342	0.0745		2.6100	2.6100		2.4201	2.4201	0.0000	7,593.6761	7,593.6761	2.2391		7,640.6971
Total	**5.6001**	**63.5012**	**34.3342**	**0.0745**	**0.1704**	**2.6100**	**2.7804**	**0.0195**	**2.4201**	**2.4396**	**0.0000**	**7,593.6761**	**7,593.6761**	**2.2391**		**7,640.6971**

3.3 Grading - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2572	2.5172	3.8603	5.8900e-003	0.1388	0.0299	0.1687	0.0380	0.0275	0.0654		589.4833	589.4833	4.4800e-003		589.5774
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0232	0.0363	0.3309	6.3000e-004	0.0566	4.4000e-004	0.0570	0.0150	4.0000e-004	0.0154		53.7103	53.7103	2.9500e-003		53.7723
Total	**0.2803**	**2.5534**	**4.1911**	**6.5200e-003**	**0.1954**	**0.0303**	**0.2257**	**0.0530**	**0.0279**	**0.0808**		**643.1937**	**643.1937**	**7.4300e-003**		**643.3496**

3.4 Drainage/Utilities/Subgrade - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.5104	56.3673	31.2653	0.0662		2.7649	2.7649		2.5640	2.5640		6,714.3266	6,714.3266	1.9628		6,755.5448
Total	**5.5104**	**56.3673**	**31.2653**	**0.0662**		**2.7649**	**2.7649**		**2.5640**	**2.5640**		**6,714.3266**	**6,714.3266**	**1.9628**		**6,755.5448**

3.4 Drainage/Utilities/Subgrade - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0464	0.0726	0.6618	1.2700e-003	0.1132	8.7000e-004	0.1140	0.0300	8.0000e-004	0.0308		107.4207	107.4207	5.9000e-003		107.5445
Total	**0.0464**	**0.0726**	**0.6618**	**1.2700e-003**	**0.1132**	**8.7000e-004**	**0.1140**	**0.0300**	**8.0000e-004**	**0.0308**		**107.4207**	**107.4207**	**5.9000e-003**		**107.5445**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.5104	56.3673	31.2653	0.0662		2.7649	2.7649		2.5640	2.5640	0.0000	6,714.3266	6,714.3266	1.9628		6,755.5448
Total	**5.5104**	**56.3673**	**31.2653**	**0.0662**		**2.7649**	**2.7649**		**2.5640**	**2.5640**	**0.0000**	**6,714.3266**	**6,714.3266**	**1.9628**		**6,755.5448**

3.4 Drainage/Utilities/Subgrade - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0464	0.0726	0.6618	1.2700e-003	0.1132	8.7000e-004	0.1140	0.0300	8.0000e-004	0.0308		107.4207	107.4207	5.9000e-003		107.5445
Total	**0.0464**	**0.0726**	**0.6618**	**1.2700e-003**	**0.1132**	**8.7000e-004**	**0.1140**	**0.0300**	**8.0000e-004**	**0.0308**		**107.4207**	**107.4207**	**5.9000e-003**		**107.5445**

3.5 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	6.1813	53.9062	32.1391	0.0623		2.7350	2.7350		2.5868	2.5868		6,481.1090	6,481.1090	1.2897		6,508.1927
Total	**6.1813**	**53.9062**	**32.1391**	**0.0623**		**2.7350**	**2.7350**		**2.5868**	**2.5868**		**6,481.1090**	**6,481.1090**	**1.2897**		**6,508.1927**

3.5 Building Construction - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3765	2.6698	5.2919	6.0600e-003	0.1721	0.0379	0.2099	0.0491	0.0348	0.0839		603.5368	603.5368	4.9000e-003		603.6397
Worker	0.0928	0.1451	1.3235	2.5300e-003	0.2263	1.7500e-003	0.2281	0.0600	1.6000e-003	0.0616		214.8414	214.8414	0.0118		215.0890
Total	**0.4692**	**2.8148**	**6.6154**	**8.5900e-003**	**0.3984**	**0.0396**	**0.4380**	**0.1091**	**0.0364**	**0.1455**		**818.3782**	**818.3782**	**0.0167**		**818.7287**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	6.1813	53.9062	32.1391	0.0623		2.7350	2.7350		2.5868	2.5868	0.0000	6,481.1090	6,481.1090	1.2897		6,508.1927
Total	**6.1813**	**53.9062**	**32.1391**	**0.0623**		**2.7350**	**2.7350**		**2.5868**	**2.5868**	**0.0000**	**6,481.1090**	**6,481.1090**	**1.2897**		**6,508.1927**

3.5 Building Construction - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3765	2.6698	5.2919	6.0600e-003	0.1721	0.0379	0.2099	0.0491	0.0348	0.0839		603.5368	603.5368	4.9000e-003		603.6397
Worker	0.0928	0.1451	1.3235	2.5300e-003	0.2263	1.7500e-003	0.2281	0.0600	1.6000e-003	0.0616		214.8414	214.8414	0.0118		215.0890
Total	**0.4692**	**2.8148**	**6.6154**	**8.5900e-003**	**0.3984**	**0.0396**	**0.4380**	**0.1091**	**0.0364**	**0.1455**		**818.3782**	**818.3782**	**0.0167**		**818.7287**

3.6 Architectural Coating - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.1133					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**5.1133**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.6 Architectural Coating - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0618	0.0967	0.8823	1.6900e-003	0.1509	1.1700e-003	0.1521	0.0400	1.0700e-003	0.0411		143.2276	143.2276	7.8600e-003		143.3927
Total	**0.0618**	**0.0967**	**0.8823**	**1.6900e-003**	**0.1509**	**1.1700e-003**	**0.1521**	**0.0400**	**1.0700e-003**	**0.0411**		**143.2276**	**143.2276**	**7.8600e-003**		**143.3927**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.1133					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**5.1133**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.6 Architectural Coating - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0618	0.0967	0.8823	1.6900e-003	0.1509	1.1700e-003	0.1521	0.0400	1.0700e-003	0.0411		143.2276	143.2276	7.8600e-003		143.3927
Total	**0.0618**	**0.0967**	**0.8823**	**1.6900e-003**	**0.1509**	**1.1700e-003**	**0.1521**	**0.0400**	**1.0700e-003**	**0.0411**		**143.2276**	**143.2276**	**7.8600e-003**		**143.3927**

3.6 Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.1133					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**5.1133**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.6 Architectural Coating - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0548	0.0869	0.7847	1.6900e-003	0.1509	1.1100e-003	0.1520	0.0400	1.0200e-003	0.0410		137.9200	137.9200	7.2000e-003		138.0713
Total	**0.0548**	**0.0869**	**0.7847**	**1.6900e-003**	**0.1509**	**1.1100e-003**	**0.1520**	**0.0400**	**1.0200e-003**	**0.0410**		**137.9200**	**137.9200**	**7.2000e-003**		**138.0713**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.1133					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**5.1133**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.6 Architectural Coating - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0548	0.0869	0.7847	1.6900e-003	0.1509	1.1100e-003	0.1520	0.0400	1.0200e-003	0.0410		137.9200	137.9200	7.2000e-003		138.0713
Total	**0.0548**	**0.0869**	**0.7847**	**1.6900e-003**	**0.1509**	**1.1100e-003**	**0.1520**	**0.0400**	**1.0200e-003**	**0.0410**		**137.9200**	**137.9200**	**7.2000e-003**		**138.0713**

3.7 Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1747	12.5544	7.4261	0.0151		0.5593	0.5593		0.5158	0.5158		1,518.3474	1,518.3474	0.4539		1,527.8787
Paving	0.1946					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3694**	**12.5544**	**7.4261**	**0.0151**		**0.5593**	**0.5593**		**0.5158**	**0.5158**		**1,518.3474**	**1,518.3474**	**0.4539**		**1,527.8787**

3.7 Paving - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0548	0.0869	0.7847	1.6900e-003	0.1509	1.1100e-003	0.1520	0.0400	1.0200e-003	0.0410		137.9200	137.9200	7.2000e-003		138.0713
Total	**0.0548**	**0.0869**	**0.7847**	**1.6900e-003**	**0.1509**	**1.1100e-003**	**0.1520**	**0.0400**	**1.0200e-003**	**0.0410**		**137.9200**	**137.9200**	**7.2000e-003**		**138.0713**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1747	12.5544	7.4261	0.0151		0.5593	0.5593		0.5158	0.5158	0.0000	1,518.3474	1,518.3474	0.4539		1,527.8787
Paving	0.1946					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3694**	**12.5544**	**7.4261**	**0.0151**		**0.5593**	**0.5593**		**0.5158**	**0.5158**	**0.0000**	**1,518.3474**	**1,518.3474**	**0.4539**		**1,527.8787**

3.7 Paving - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0548	0.0869	0.7847	1.6900e-003	0.1509	1.1100e-003	0.1520	0.0400	1.0200e-003	0.0410		137.9200	137.9200	7.2000e-003		138.0713
Total	**0.0548**	**0.0869**	**0.7847**	**1.6900e-003**	**0.1509**	**1.1100e-003**	**0.1520**	**0.0400**	**1.0200e-003**	**0.0410**		**137.9200**	**137.9200**	**7.2000e-003**		**138.0713**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.7131	4.2473	34.0935	0.0645	5.2901	0.0468	5.3369	1.4038	0.0431	1.4469		5,340.2441	5,340.2441	0.2610		5,345.7255
Unmitigated	3.7131	4.2473	34.0935	0.0645	5.2901	0.0468	5.3369	1.4038	0.0431	1.4469		5,340.2441	5,340.2441	0.2610		5,345.7255

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	1,140.75	1,331.72	1005.55	2,182,483	2,182,483
Parking Lot	0.00	0.00	0.00		
Total	1,140.75	1,331.72	1,005.55	2,182,483	2,182,483

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.603906	0.062714	0.176356	0.114004	0.029626	0.004163	0.000000	0.000000	0.002626	0.000000	0.006605	0.000000	0.000000

4.4 Fleet Mix

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0819	0.7449	0.6257	4.4700e-003		0.0566	0.0566		0.0566	0.0566		893.8659	893.8659	0.0171	0.0164	899.3058
NaturalGas Unmitigated	0.0819	0.7449	0.6257	4.4700e-003		0.0566	0.0566		0.0566	0.0566		893.8659	893.8659	0.0171	0.0164	899.3058

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Hotel	7597.86	0.0819	0.7449	0.6257	4.4700e-003		0.0566	0.0566		0.0566	0.0566		893.8659	893.8659	0.0171	0.0164	899.3058
Total		**0.0819**	**0.7449**	**0.6257**	**4.4700e-003**		**0.0566**	**0.0566**		**0.0566**	**0.0566**		**893.8659**	**893.8659**	**0.0171**	**0.0164**	**899.3058**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Hotel	7.59786	0.0819	0.7449	0.6257	4.4700e-003		0.0566	0.0566		0.0566	0.0566		893.8659	893.8659	0.0171	0.0164	899.3058
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0819**	**0.7449**	**0.6257**	**4.4700e-003**		**0.0566**	**0.0566**		**0.0566**	**0.0566**		**893.8659**	**893.8659**	**0.0171**	**0.0164**	**899.3058**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.4939	1.7000e-004	0.0177	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0373	0.0373	1.0000e-004		0.0395
Unmitigated	3.4939	1.7000e-004	0.0177	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0373	0.0373	1.0000e-004		0.0395

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0806					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.4116					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.7100e-003	1.7000e-004	0.0177	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0373	0.0373	1.0000e-004		0.0395
Total	**3.4939**	**1.7000e-004**	**0.0177**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**		**0.0373**	**0.0373**	**1.0000e-004**		**0.0395**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0806					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.4116					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.7100e-003	1.7000e-004	0.0177	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0373	0.0373	1.0000e-004		0.0395
Total	**3.4939**	**1.7000e-004**	**0.0177**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**		**0.0373**	**0.0373**	**1.0000e-004**		**0.0395**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation